The Colonial & Indian Exhibition. 1886

Report on Educational Court

By S. P. May M.D.

Toronto University. 1886

Ontario Public School. 1886

Collegiate Institute. 1886

Ontario Public School. 1847

Education Department

Province of Ontario. Canada, 1887

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CHART OF THE WORLD SHOWING THE BRITISH POSSESSIONS.

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REPORT

ON THE

SCHOOL APPLIANCES,

PUPILS' WORK, ETC.,

EXHIBITED BY THE

EDUCATION DEPARTMENT OF ONTARIO, CANADA,

AT THE

COLONIAL AND INDIAN EXHIBITION,

LONDON, ENGLAND, 1886.

PUBLISHED UNDER THE DIRECTION OF THE HONORABLE THE MINISTER OF EDUCATION.

BY

S. PASSMORE MAY, M.D., C.L.H.,

Commissioner of Education at Exhibition.

LIBRARY

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THE ONTARIO INSTITUTE FOR STUDIES IN EDUCATION

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1887.

EDUCATION DEPARTMENT.

TORONTO, March 1, 1887.

To the Honorable GEORGE W. ROSS, LL.B :

SIR,—I have the honor to present herewith my report on the Educational Exhibits for Ontario at the Colonial and Indian Exhibition, London, 1886. It contains a condensed list of the exhibits of school appliances and pupils' work, with remarks on the fittings and arrangement of the Educational Court of Ontario, together with newspaper notices, reviews, etc., showing the public appreciation of, and the great interest taken in, these exhibits by visitors to the Exhibition.

In addition to the description of Ontario exhibits, I have prepared an Appendix with short historical sketches of each colony and British dependency which took part in the Exhibition, accompanied by a map so colored as to show the British possessions throughout the world ; also a brief notice of the proposed Imperial Institute.

I may remark that about five and a-half millions of people visited the Exhibition, and the Educational Court was daily crowded from the time of opening until its closing ; and there is not the least doubt that the interests of this Province were promoted in Great Britain and on the Continent of Europe by showing the advanced position of education and science in the Institutions under your control.

I have the honor to be, Sir,
Your obedient servant,

S. P. MAY.

INTRODUCTION.

Since the inauguration of the World's Fair in 1851, succeeding International Exhibitions have been held for bringing together people of different nations in peace and amity, to exhibit the productions of their countries and compare with one another the influence of industry, commerce and education on the civilized world; but the Colonial and Indian Exhibition, in a British point of view, is still more important; it is the first imperial display on English soil, showing the resources and capabilities of the Indian Empire, together with the magnitude, vast national wealth, industrial activity and enterprise, and education and culture of the colonies and British possessions, which constitute Greater Britain beyond the seas.

This Exhibition is primarily due to the foresight of H. R. H. the Prince of Wales, whose earnest desire and object has been that the series of exhibitions, held during the past few years at South Kensington, should culminate finally in one great imperial display of the resources and industries of the British colonies and Empire of India. His Royal Highness, as Executive-President of the Royal Commission, at the first meeting of the Commissioners, held March 30th, 1885, said that the project was essentially one of a national and imperial character, differing in this respect from former exhibitions, in which the elements of trade rivalry and profit largely predominated. It was decided that the Exhibition be held in the buildings and grounds at South Kensington, formerly used for the inventories, fisheries and other exhibitions. The governments of the different colonies were corresponded with, and as a rule they heartily co-operated with the scheme, large sums of money were voted and Executive Commissioners appointed for each country.

General regulations were issued by the Royal Commissioners for the guidance of the Executive Commissioners, which gave the latter considerable power. For example, the objects to be exhibited were left entirely to the discretion of the Governments participating, in so far as they illustrated the resources, products and manufactories of the country. There was no charge for space. Motive power and water were supplied free of cost. The Executive Commissioners had entire control of the arrangement of goods, but they had to provide all necessary attendance for keeping the exhibits properly cleaned and in good order, and all expenses connected with display and installation had to be paid by the Executive Commissioners.

On the other hand the Royal Commissioners wielded great power—they received all entrance fees, they insisted that all goods should be left uncovered from 10 a. m. to 10 p. m. on all days except Wednesdays and Saturdays, when the hour of closing was 11 p. m. No exhibit could be removed from the building without the permission of the Executive Commissioner, countersigned by the Secretary of the Royal Commissioners. No exhibit could be photographed without permission of the Secretary of the Royal Commissioners. The Royal Commissioners reserved the right of publishing and selling a general catalogue—any special catalogues had to be sold through the official publishers to the Royal Commissioners. The Royal Commissioners were not responsible for any loss or damage from whatsoever cause arising.

The Exhibition was declared to be opened by Her Majesty the Queen, on Tuesday, May 4th, 1886, in presence of the representatives of her subjects from every corner of the globe, and yet not every corner, as the *Canadian Gazette* says, for, sad to say, one part of British North America, Newfoundland—still isolated, though it would seem naturally intended to complete the existing confederation from Atlantic to Pacific—remained almost

alone among British Colonies in absenting itself from participation in the great family gathering. The first feature in the day's programme consisted of the Royal progress through the Exhibition. Her Majesty was received by H. R. H. the Prince of Wales and Royal Commissioners, and some of the Colonial Commissioners, amongst them Sir Charles Tupper and the Hon. Hector Fabre representing Canada; the procession passed through some of the principal courts and entered the Canadian section in the middle of the central gallery. Facing Her Majesty on her entrance was the large coat of the Royal Arms, belonging to the Education Department of Ontario, lent to the Executive Commissioners for the occasion, Immediately in front of the entrance were arranged tiers of seats for the officers of the executive staff, etc., and in addition a large number of seats were provided throughout the court for Canadian residents and exhibitors. Her Majesty was received in the Canadian Court with enthusiastic cheering, and had a gracious smile and bow for every person. The procession then took a direct route to the Albert Hall, where the inaugural ceremony was held.

H. R. H. the Prince of Wales made a final inspection of the various Courts of the Exhibition on Saturday, May 6th, and expressed himself as much pleased with the Canadian section.

On Friday, May 21st, Her Majesty the Queen, accompanied by H.R. H. the Prince of Wales, Princess Beatrice and the Duchess of Albany, visited the Canadian section, and I had the honor of receiving them at the entrance to the Educational Court.

H. R. H. the Princess Louise and the Marquis of Lorne, as President of the Canadian Commissioners, were frequently in the Exhibition, and took the greatest interest in its progress and completion, and were ever ready to make suggestions or co-operate with Canadians by using their influence in making these exhibits more prominent and attractive.

The English and Foreign press were unanimous in their expression of admiration of the magnitude and commercial value of the Exhibition, and some of them referred to its great importance in a moral aspect, for instance, the *Times* says, "At the time of the first great exhibition, five-and-thirty years ago, it could hardly have occurred to anyone that the British Empire itself could, in the next generation, be capable of furnishing from its own resources an exhibition of the products of its industry, agriculture and fine arts, by the side of which even the great exhibition of 1851 would almost have paled its ineffectual fires. But it is as the symbol of the moral unity of natural sentiments which constitutes a world-wide empire that the Exhibition appeals most strongly to every subject of the Queen.

The *Standard*, after referring to the display being of immense commercial and political value, says, "The fraternity of nations, to accomplish which was the object of the Exhibition of 1851, was a dream; the oneness of the British Empire, as shown by the present show, is a fact."

The *Daily Telegraph* refers to the fact that Canada is now not only within a week of Liverpool, but has supplied in its transcontinential railway a new link with the distant dependencies on the Pacific Ocean.

The *Echo* regards the Exhibition as an event of national importance. "It will," it says, "bring home to the crowds, as nothing has brought home to them before, the greatness of the Colonial Empire of which most Englishmen know so little; and show that if a union of the whole be once placed beyond uncertainty, a career lies before us which may even eclipse our past lustre."

The *Morning Post*, after reviewing the vast changes in the British Empire since the age of exhibitions commenced, remarks that India was still unsettled. New Zealand was the object of contention between English settlers and the Maories, the magnificent colonies of Australia were still but a "dumping ground" for the dregs of the criminal classes of the old country, while Canada was only commencing the work of constructing the networks of railways, which now brings the produce of her most distant fields within reach of the markets of Europe.

Not only the press, but the people themselves, were enthusiastic in their appreciation of the efforts of the colonists to show the world the fruits of their industry, self-reliance and indomitable perseverance. Entertainments were provided for the representatives of

the different countries by royalty, nobility, steamboat, railway and public companies, municipal corporations of various cities and towns, city guilds, manufactories, private individuals, etc. It seemed, in fact, as if all classes of people throughout the country were anxious to acknowledge their blood relationship to their friends from the colonies.

It is not my province to enter into a detailed description of the various exhibits. I shall, therefore, briefly refer to the general Canadian Exhibition, and then point out the principal features of our Educational Exhibit, and finally give a condensed summary of the educational exhibits from the different countries belonging to the British Empire.

The Commissioners in London, representing the Dominion of Canada, were as follows:—

PRESIDENT.

The Marquis of Lorne, K.T., G.C.M.G.

VICE-PRESIDENT.

Viscount Monck, G.C.M.G.

EXECUTIVE COMMISSIONER.

The Hon. Sir Charles Tupper, G.C.M G., C.B.

HONORARY COMMISSIONERS.

The members of the Government of the Dominion, who were in London during the Exhibition :

The Hon. Hector Fabre, C.M.G.

The Hon. Gédéon Ouimet, Superintendent of Education, Quebec.

The Hon. George Kirkpatrick.

The Hon. George W. Ross, L.L.B,, Minister of Education for Ontario.

JOINT SECRETARIES.

Frederick J. S. Dore, Thomas Cross.

ACCOUNTANT.

C. C. Chipman.

The Dominion had over 2,000 exhibitors, and occupied nearly 100,000 square feet of space. Unfortunately this space was very much sub-divided, the original space awarded to Canada was inadequate for the display of all its exhibits, consequently additional space in different parts of the buildings had to be granted from time to time as the goods arrived. It was, therefore, impossible to classify the goods so well as could have been done had all the allotted spaces been in one place. It was, however, a grand display, a practical exemplification of the products, manufactures and education of our great country, and although not fitted up so showily as some of the others, it was universally acknowledged that the exhibition was thoroughly practical, and the decorations neat in design, were so arranged as to harmonise with the exhibits.

The *Times'* remarks, in reference to the area occupied by Canada, are as follows:—

"Had the Dominion kept aloof what a blank there would have been any one can realize who look at a plan of the Exhibition, and see how Canada is spread almost all over the building, from the gateways of British Guiana and the West Indies on the one side to the frontiers of Natal and the Cape on the other, reaching south to the confines of New Zealand and stretching away int the North-West Territories of the arcades and the conservatory. Our American Dominion indeed, occupies quite as much space as our Asiatic Empire, and nearly as much as all the Australian colonies put together. And rightly so, no doubt, for has she not an area of some three million square miles, and can she not look back upon a venerable antiquity of 300 years? Had

she not cities and cathedrals, legislatures and great battle-fields, long before anybody thought of making Botany Bay even a penal settlement? The Canadians have evidently determined that in variety and quantity of exhibits, at least, they shall not be excelled, and, on the whole, they have succeeded. In more than one department they are not approached. In none of the courts i progress in all directions more striking and more patent; none of them—with, perhaps, the exception of India—have richer resources of a solid and enduring character to show; and, all in all, none of them can glory in more marvellous results of human industry."

I may remark, too, that Canada was the only country which exhibited machinery in motion.

The *Leeds Mercury* says:—"Pushing Canada comes out bravely with agricultural products, and with machinery and implements, too, being singular in this latter display, as the other Colonies do not show a score of implements between them. The display, as it is, must fill the ordinary visitor with astonishment, and make him proud of his birthright as a Briton. No other nation in the world could make such a magnificent display of its own products and manufactures.'

Foreign journals have also shown their apprec ation of the importance of the Exhibition. Among these is *L'Independance Belge* of Brussels, which says:—"Canada, as large as Europe, covering an area of 2½ million square miles, occupies a prominent place at the Exhibition. Especially in agriculture does it excel. The trophy of grain and fruits is *grandiose*, and one may say as much of the agricultural implements—tools so perfect and so superior to everything made in Europe, that economists are asking why its (Canada's) manufacturers persist in sheltering themselves behind protective duties."

The exhibition opened up considerable newspaper correspondence in regard to foreign and colonial competition. The following extract is from an excellent letter on "Buying goods abroad," by an "Englishman," published in the *Daily Telegraph*:

"I have to submit that England has not only to contend with foreign, but must also be prepared to meet Colonial competition. Many of the Colonies already in several manufactures supply their own wants, some are exporting to other Colonies, whilst some, instead of receiving, are sending finished goods, and not raw material only, to the mother country. The present Exhibition at South Kensington will directly tend to this result. Take the case of Canada: it is generally admitted that the courts allotted to the Dominion are the most practical displays in the whole Exhibition. The machinery hall is always crowded, and the agricultural machines, several of them in motion, attract a great deal of attention. Probably it has surprised many to witness the degree of excellence in their manufacture attained by the Canadians. They boast, I am told, that their machines are superior to any in the world, the American inventions not excepted. The makers are always on the alert to pick up a new idea, which they adopt with no consideration of expense. A great need for labor-saving contrivances has stimulated their production. Here, with an agricultural population in excess of the demand, there has been rather a retarding influence at work, and machines which take the bread out of the mouths of men have been slow to advance in the agriculturist's favor. Thus it has come about that so young a country as Canada can now claim the lead with a unique collection of steam threshers, self-raking reapers, binders, mowers, harvesters, hay-tedders, etc.

The wealth which Canada possesses in her splendid forests has, within the last few years particularly, considerably improved her position as a manufacturing country. The manufacture of doors, sashes, and blinds constitutes an industry especially prosperous in Ontario. There are specimens on view at South Kensington, and the prices are said to be lower than that at which the same kind of articles can be turned out by English carpenters. We import large quantities of ready-made doors from Germany and other parts of the continent, and the question is asked by Canadians, 'Why patronise the foreigner, when we can serve you better?'"

Letters were then published referring to the superiority of German goods which, they said, was owing to the practical and technical education of the German nation.

I immediately put myself in communication with some of the principal newspapers, and endeavoured to show that the improvement in our manufactures and more artistic finish on certain classes of our goods is due to the free education of our people. I referred to our Mechanics' Institutes and Art Schools, also to the specimens of industrial work exhibited, and invited the public to visit the Educational Court and find out for themselves what I consider to be the strong points by which Canada has so prominently and

successfully shown the excellence of her manufactures to the people of older and more wealthy nations.

The following extract on this subject is from the *Canadian Gazette :*

"English journals have recently taken pains to point out how Canadians are excelling in the manufacture of certain implements, and how hard British manufacturers are being pressed by competition here and competition there. Why is this? Must not the cause be sought in the technical and practical education which it is so vital a part of the Canadian, German, and other systems to instil into the young mind? And cannot the superiority of design and execution shown in many branches of Canadian manufactures be attributed to the thoroughness of the educational system adopted by Ontario and other Provinces of the Dominion? In addition to the 5,300 public and separate schools through which the poorer and middle classes in every village, town, city and township, may obtain free education, the system of higher education is such that a boy who is the son of poor parents may, by his own talents, rise from the public school even to the university. In connection with some of the principal public schools the Kindergarten system is in force ; while the various branches taught apply directly to commercial life, and drawing of an industrial character is made compulsory. All-important, too, are the Provincial Normal and Model schools for preparing young men and women for the teaching profession ; the various classical schools designed to furnish a higher English or classical course with modern languages ; the University of Toronto, and the University College ; the technical schools of practical science, art and agriculture ; the schools for the deaf, dumb, and blind ; the institutions partly aided by Government, such as local art schools, artists, mechanics, scientific, and entomological institutions ; and lastly the universities, colleges and schools not under Provincial control. These combine to form an educational system of no ordinary completeness, and one of which Ontario has every reason to be proud. It is one also from which European countries may learn much in the improvement of parts of their own systems."

The Educational Court of Ontario.

On my arrival in England I found that it was impossible to obtain the space in the Central Court for which we had made application, but Sir Charles Tupper gave me the choice of three different spaces. I selected an area of about 3,000 feet floor space in the western gallery, between the New Zealand Court and the Canadian Machinery Department. This proved to be one of the most popular and attractive sections of the whole exhibition. Agricultural implements, etc., in motion was a novelty to the English people, who assembled in large numbers to witness the labour-saving appliances of this country. These crowds of people had to pass through the Educational Court of Ontario in order to visit the New Zealand Court, and in addition the aquarium was adjoining. The consequence was that our Court was continually crowded,and the probability is that hundreds of thousands of visitors had an opportunity of examining our exhibits who might not have seen them had the Educational Court been situated in some other part of the building.

As the space was limited, galleries and divisions were erected which gave several thousands of feet of wall space ; for the protection of apparatus, school work, etc., a large number of glass cases were provided ; the walls, archways, etc., were decorated to harmonise with the exhibits, and the *tout ensemble* was such as to draw enconiums from the British press and educational journals.

The following editorial from the *Globe Colonial Exhibition Supplement*, published soon after the opening ceremony, is a good description of the general appearance of our Educational Exhibit :—

"Ontario is justly proud of her educational system ; for it not only takes first rank in the Dominion, but will also bear comparison with that of many countries in the Old World. That it was most desirable that adequate evidence should be sent to South Kensington of the good work done by and in the Province in this direction, no argument was needed to show ; and the Ontario Government were prompt to recognise, and to endeavor to discharge, the responsibility which devolved upon them. The work of preparing a thoroughly representative and creditable educational exhibit was undertaken with zeal and energy. And, thanks to the enterprise shown by the Provincial Government, to the personal attention given to the task by the Hon. G. W. Ross, Minister of Education, and to the organizing skill and untiring industry of Dr. May, the result is an Educational Court, which is one of the most remarkable features of the Canadian Section, and which has already won high praise from British educational experts.

The Education Department of Ontario, now under the direction of Mr. Ross, controls the Provincial Normal and Model schools ; the county model schools ; and the public, separate, and high schools and collegiate institutes. In addition, it has a voice in the management of all other educational institutions in the Province which receive Government aid for educational purposes ; such, for example, as Upper Canada College, the School of Practical Science, University College, Mechanics' Institutes, Art Schools, etc. In one or more forms all the departments of educational activity are represented at South Kensington. Hence it is not surprising to find that the collection in Dr. May's charge is extremely comprehensive, and occupies to the full the 3,000 feet of space accorded to it. Nor is it a matter for wonder that the special catalogue should form a good sized pamphlet, and should contain a list embracing nearly 3,000 separate entries. Deferring detailed notice of the different divisions of the exhibit, it must suffice on the present occasion to notice briefly its chief features and general arrangement.

The area assigned to Ontario is in the West Gallery, between the New Zealand Court and the space occupied by Canadian agricultural machinery, and immediately adjoining one of the entrances to the Aquarium. From both the New Zealand Section and the machinery gallery, the Ontario Court is separated by artistically designed and decorated archways, which admirably serve the purpose of screens. Above the principal archway—that on the north—the visitor notices at once a large coat of the Royal arms, said, indeed, to be the largest ever exhibited. This is the work of a Torontonian, and was lent from the Educational Court to Sir Charles Tupper, to be placed facing Her Majesty upon her entrance to the Canadian Court on the opening day. Above is a bust of the Marquis of Lorne. On one side of the archway is placed a large photograph of the graduating class of the Ontario Veterinary College, containing some 85 photographs of the students, together with President Smith and the professors. These striking photographs, which attracted the attention of, and were much admired by, the Queen and the Prince of Wales, are supplemented by views of the students' dissecting-room, etc. On the opposite side of the archway, the commercial colleges of the provinces are well represented by specimens of penmanship from Hamilton, Brockville, Owen Sound, etc.

Upon entering the Court, the first thing to strike the eye is the prominently displayed motto, 'Education the Glory of Canada' ; whilst on both arches, in equally distinct lettering, are the signs, 'Educational Court, Ontario, Canada.' The rafters supporting the roof are decorated with the maple leaf ; and the southern archway, or screen, it should further be mentioned, is decked with shields of Ontario, surmounted with crowns and ornamented with flags. The Court is divided into five compartments on either side, with galleries above, approached by spiral staircases. Only in this way could Dr. May make separate divisions for each Institution and find space for the very numerous specimens of all kinds committed to his care ; and the general effect of his arrangements is an appearance of completeness and method which is not to be noticed in any other portion of the Canadian Section.

The place of honor in the centre of the Court is rightly assigned to the Educational Trophy. This consists of twelve statistical charts, representing the educational institutions under the control of the Education Department, and mounted on a 12-faced prism. Above the charts, which are quite 6 feet high by 4 feet wide, are placed photographs of the institutions ; and the prism itself is surmounted by a globe 36 inches in diameter, specially colored to show at a glance the extensive territory of Canada. The remainder of the centre of the court is filled with large glass cases, containing philosophical apparatus as used in the Public and High Schools of the Province, including a collection of School Apparatus manufactured by the Map and School Supply Company, Toronto. At the extreme end of the Court are shown astronomical and geographical globes, with plane and raised surfaces, among which we specially notice the Newtonian or Astronomical Globe exhibited by Selby & Co. The anatomical and physiological models also on view here seem to be one of the attractions of the Court, especially the manikin depicting both the external and internal structure of the human body.

The partitions of the side compartments of the Court are surmounted by pedestals supporting busts of distinguished Canadians. Thus the Hon. O. Mowat faces Sir John Macdonald ; the Hon. Geo. Brown has the Hon. J. Beverley Robinson as his *vis-a-vis* ; the Rev. Dr. Ryerson is opposite to to Sir Francis Hincks ; and the Hon. Adam Crooks to Bishop Strachan. As to the contents of the compartments on either side space only permits a few words now being said. About one-half of these contain Maps and Apparatus, the new series of Drawing Books, Text Books, Tablet Reading Lessons, and other school appliances ; the remainder being filled with illustrations of Industrial Art. This display does infinite credit to the province and to the efforts of the Government to promote this branch of study, and is calculated even to a greater degree than the Art Exhibit in the Albert Hall to open the eyes of the British public to Canada's artistic progress of recent years. The Ontario School of Art, the Western School of Art, London, and the Ottawa and the Kingston Art Schools send specimens of every class of work—in oil and water-colors, in freehand drawing, industrial designs, architectural and machine drawing, shading from the flat and from the antique, *repoussé* work, chasing in brass, modelling in clay and plaster casts from clay, electro-metallurgy, and carving in wood. Detailed references, as we

have said above, are out of the question on the present occasion. But mention must be made of the high opinion expressed by competent authorities of the productions in industrial art; of the interest aroused by the specimens of Examination work in the Elementary subjects, such as Geometry, Perspective and Model Drawing, of the admirable water-colors and painting on china, executed by the students of the London School of Art; and of the excellent general work shown from Toronto, Kingston, and Ottawa.

Various other exhibits in this portion of the Court call for brief notice. An educational map of Ontario, on a rather large scale, has both usefulness and novelty to recommend it. Specially marked to show the number of schools of all kinds and other educational institutions in each county, it conveys at a glance an amount of information which could not be fully grasped in any other way with the same ease. Messrs. Williams and Son, of Toronto, show a school piano and organ, which have deservedly gained the attention of many educationists. The public school cabinet organ in particular so admirably meets 'a long felt want,' that its introduction into this country would be hailed with much satisfaction; for this instrument, while sufficiently powerful for outdoor use, or for any ordinary school-room, is so light that it can be carried from room to room by a child ten years of age, and is sold at an extremely low price. Again, the Kindergarten furniture and materials exhibited are of more than ordinary merit, and the ordinary school furniture shown by several makers has already been made the subject of inquiry by many English scholastic authorities. Visitors of all kinds display interest in the specimens of phonotypy sent by Mr. Simpson, of Leamington; in the new series of reading lessons recently introduced; and in the numerous photographic views of the public schools, high schools, colleges, and universities, Toronto School of Medicine, Ontario Pharmaceutical College, etc. The last named, it should be stated, are all labelled, so as to show plainly the name of the institution and of the city or town in which it is situated. The remarks by visitors upon these photographs, which are again and again overheard, testify to the surprise felt at the beauty, size, and number of the buildings the public spirit and wise enterprise of Ontario have provided for educational purposes.

Proceeding now to the galleries, art is prominent on the walls of the right gallery. Here the contributions come from the Ladies' Colleges, at Woodstock, Hamilton, Whitby, Brantford, and St. Thomas, and are as varied as they are excellent in character. The Loretto Abbey, Toronto, and the Loretto Convent, Hamilton, are also exhibitors, and notably furnish some embroidery, lace-work, and painting on velvet and china, whose beauty, both of design and execution, is unquestionable. But the professional educationist will dwell specially upon the work from the public schools of Toronto and other cities and towns, villages and rural schools, which is exhibited here. As Dr. May points out in his most useful and well-arranged catalogue, the very large number of specimens shown represent the ordinary work done by pupils from seven to fourteen years of age, as follows:—Writing, specimens of general work of 416,588 pupils; arithmetic, specimens of general work of 422,076 pupils; and geography and map drawing of 280,953 pupils. The drawings have been taken from the work in progress in the schools in the middle of the term, and are consequently scarcely a fair example of the improvement which can be made in a full session. Nevertheless, the work done in map drawing, for example, is in many cases of astonishing excellence when the age of the pupil is considered. Especially interesting, too, is the whittling in wood by little children, of which many specimens are shown, from Toronto public Schools, including articles of domestic use, such as knives and forks. And this gallery cannot be left without commending the Kindergarten work in connection with the Model School of Toronto, and the Toronto Public Schools.

In the opposite gallery fitting space has been found for specimens of pupils' work, teaching appliances, photographs, etc., from the Ontario Institutions for the Blind and for the Deaf and Dumb. These are in many ways of exceptional interest. The Agricultural College at Guelph is also strongly represented with very large collections of geological, mineralogical, and botanical specimens, samples of seeds and anatomical models, statistical charts, etc., all of which demonstrate the thoroughly practical and scientific training afforded to the students. The *Institut Canadien* sends from Ottawa a variety of specimens of work in the different branches of art. But art here is principally illustrated by the specimens of Industrial Drawing done in the Mechanics' Institutes in the province, of which there is an extremely interesting display. One or two novelties in this division have in addition to be named, to wit, the model of a dram of timber as prepared for running the St. Lawrence rapids, and exhibited by Mr. Anthony Malone, of Garden Island; the working model of an English locomotive, by Mr. Lacey R. Johnson, of Carleton Place, and a marvellous piece of work by Mr. A. Parker (also of Carleton), consisting of a small ornamental inlaid table, fifteen inches in diameter, composed of 1,100 separate pieces of wood.

Brief as is the foregoing outline of Ontario's Educational Exhibit, enough has been said to indicate its exceptional merit and value, and to prove that the bold motto, 'Education the Glory of Canada,' is—in the *premier* province at least—fully justified by the work done in the past, and by the promise held out for the future. Having put their hand to the plough in this matter, Canadians are not likely to turn back. And they are to be congratulated upon the circumstance that the enterprise of the Ontario Government, and the success with which their Commissioner

at South Kensington has discharged his duties, have enabled the British public to grasp these facts more cl arly and fully than was ever possible before."

As soon as the work of installation was completed, a list of the exhibits was put in the hands of the printer, and a catalogue of 76 pages, containing nearly 3,000 separate exhibits, was published. The numbers on the catalogue corresponded with the numbers on the labels attached to the exhibits. Five thousand catalogues were distributed. In addition to the Educational Catalogue, the Canadian Catalogue contains a list of our exhibits, which occupied 25 pages. The Official Catalogue also devoted several columns to our exhibits.

The following is a copy of the Educational Catalogue in a condensed form :—

CATALOGUE.

The Education Department of Ontario, under the direction of the Hon. Geo. W. Ross, LL.B., M.P.P., Minister of Education, controls the Provincial, Normal, and Model Schools ; County Model Schools ; Public, Separate and High Schools, and Collegiate Institutes ; also, Upper Canada College, School of Practical Science, University College, Toronto University, Educational Museum, and Art Schools, Mechanics' Institutes, and all other Institutions receiving Government aid for Educational purposes in the Province of Ontario.

PART I.

NORMAL AND MODEL SCHOOLS, PUBLIC AND HIGH SCHOOLS, AND COLLEGIATE INSTITUTES.

Class 1.—Historical and Statistical.

Annual Reports of the Normal and Model, High and Public Schools of Ontario, from 1845 to 1885.
Special Educational Reports, 1868 to 1876.
Journal of Education for Ontario, from 1848 to 1877.
Statutes and Regulations respecting Public and High Schools, 1885.
Revised Statutes of Ontario, 2 vols.
Ontario Educational Exhibit at Philadelphia in 1876, by J. G. Hodgins, LL.D., Deputy-Minister.
Catalogue of the Museum of the Education Department of Ontario, by S. P. May, M.D., Superintendent.
Educational Trophy, consisting of 12 Statistical Charts, each 6 feet by 4 feet, with large Photographs of Buildings mounted on a 12-faced prism, surmounted by a cylinder, supporting a 36-inch Globe so colored as to show the extensive territory of Canada.
The Charts are as follow :—
Progress of the Public Schools of Ontario in forty years.
Progress of the Collegiate Institutes and High Schools in twenty-five years.
Statistics for 1886 of County Model Schools, Training Institutes, and Teachers' Institutes.
Statistics for 1886 of the Ontario School of Art, Education Department, Toronto.
Statistics for 1886 of the Mechanics' Institutes and Free Public Libraries in Ontario.
Statistics for 1886 of University College and the University of Toronto.
Statistics for 1886 of the School of Practical Science, Toronto.
Statistics of Upper Canada College, Toronto.
Statistics of Ontario Agricultural College, Guelph.
Statistics of Ontario Institution for the Education of the Blind, Brantford.
Statistics of Ontario Institute for the Deaf and Dumb, Belleville.

Map of the Province of Ontario, showing the Public Schools, Separate Schools, High Schools, Collegiate Institutes, Universities and Colleges.

Grip Publishing Company, Toronto.

Education Weekly, from July to December, 1885.

CLASS 2.—SCHOOL METHOD AND ORGANIZATION.

Public School Daily Register for recording the Attendance of Pupils.
Register of Daily Attendance, etc., in High Schools and Collegiate Institutes.
Honor Rolls for High and Public Schools.
Examination Papers for Provincial Certificates, Entrance Examinations, etc.
Text Books on the History and Science of Education.
Manual of Hygiene for Schools and Colleges, Education Department, Toronto.
Scripture Readings for High and Public Schools, authorized by the Education Department.

CLASS 3.—SCHOOL ARCHITECTURE AND PHOTOGRAPHS OF SCHOOL BUILDINGS.

Hints and Suggestions on School Architecture and Hygiene, with 75 Plans and Illustrations, for the use of School Trustees in Ontario, prepared under the direction of the Hon. the Minister of Education, by J. Geo. Hodgins, LL.D., Deputy-Minister.

Photographs of Schools, Colleges, etc.

Normal and Model Schools :—

Normal and Model Schools, Toronto.
Do. do. Ottawa.

Public Schools :—

Brantford—Central School, East Ward School, North Ward School, King's Ward School.
Goderich—Central School, Public School.
Hamilton—Public School, Ward Public School.
Ingersoll—Central School.
London—Central School, Hamilton Road School, Princess Avenue School, Rectory Street School.
Morrisburg—Public School.
Napanee—Public School.
Ottawa—Central School, Central Public School (East), Victoria Ward Primary School.
Peterborough—Roman Catholic Separate School for Boys.
Toronto—Ryerson Street School, Wellesley Street School, Dufferin Street School, Hope Street School, Victoria Street School, Jesse Ketchum School, Bolton Avenue School.
Woodstock—Central Public School.

Indian Schools :—

Sault Ste. Marie—Shingwauk Home for Indian Boys.
Do. Wananosh Home for Indian Girls.

Union High and Public Schools :—

Belleville, Port Perry.

High Schools :—

Goderich, Morrisburg, Stratford, Woodstock.

Collegiate Institutes :—

Brantford, Guelph, Ingersoll, Ottawa, Peterborough, St. Catharines, Toronto.

CLASS 4.—SCHOOL FURNITURE AND FITTINGS.

Bennet Furnishing Company, London.

Style A Bennet Desk and Seat, 3 sizes ; Style B Bennet Desk and Seat, 3 sizes ; Bennet Grammar School Locked Desk.

W. Stahlschmidt, Preston.

Teacher's Desk, Marvel School Desk ; Single Rear Seat for same ; Marvel School Desk, 4 sizes ; Model School Desk, Improved Favorite School Desk.

Map and School Supply Company, Toronto.

(See also Map and Apparatus Departments.)

Numeral Frame, with Blackboard ; Numeral Frame on Stand ; Sheepskin Eraser for Blackboard ; Fluted Eraser for Blackboard.

CLASS 5.—KINDERGARTEN MATERIAL.

Selby & Co., Toronto.

(See also Drawing Models.)

Kindergarten Tables, with tops marked in inch squares ; Kindergarten Chairs, (6 Chairs colored to represent the primary colors) ; Kindergarten Toys, etc,

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CLASS 6.—PHYSICAL EDUCATION.

Maclaren's Physical Education.

Gymnasium, with the necessary Apparatus to perform the Gymnastic Exercises in Movements and Positions, Exercises of Progression, etc., Dumb Bells, Indian Clubs.

CLASS 7.—TEXT-BOOKS.

Authorized for use in Public Schools in following Subjects (for list see Special Catalogue) :—

Reading and English Literature, 8 vols.; Book-keeping, 2 vols.; Arithmetic, 4 vols.; Geography, 7 vols.; Grammar and Composition, 7 vols.; History, 4 vols.; Algebra, 4 vols.; Geometry, 3 vols.; Chemistry and Agriculture, 2 vols.; Natural

Philosophy, 4 vol.; Elementary Physics, 3 vols.; Agriculture, 1 vol.; Music, 4 vols.; Drawing, 5 vols.

Copp, Clark & Co., Toronto.

Readers authorized by the Minister of Education.
First Book mounted on cards.
Reading Lessons to accompany First Book mounted on cards.
Mercantile Graded Copy Books.

Canada School Publishing Company, Toronto.

Coleridge's "Ancient Mariner" and selected Minor Poems.
Ayres' and Armstrong's Verbalist.
Ayres' and Armstrong's Orthoëpist.
Swinton's Language Lessons.
Williams' Composition and Practical English.
Jeffers' History of Canada.
Thompson's History of England.
Collier's History of British Empire.
Morrison's Trigonometry.
Royal Canadian Readers.
Beatty's Ontario Writing Course.
Tuft's and Preston's Public and High School Music Readers.
Canadian Drawing Course, 5 books.
Set of Charts for Drawing Books.
Set of Drawing Books mounted in frames.

Warwick & Sons, Toronto.

Physical Culture, by E. B. Houghton.
School Management, by Baldwin and Dawson.
English Literature for High Schools.

Text-Books authorized for use in High Schools and Collegiate Institutes in following subjects (for list see Special Catalogue) :—
English, 14 vols.; Latin, 8 vols.; Greek, 7 vols.; French, 11 vols.; German, 4 vols.; Mathematics, 18 vols.; History, Geography and Antiquities, 17 vols.; Physical Science, 17 vols.; Miscellaneous 10 vols.

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Class 8.—Reading Charts, &c.

Copp, Clark & Co., Toronto.

Reading Lessons to accompany authorized series of Reading Books.
Calkin's Phonetic Charts for Self-Training in the Sounds of Language.

Caleb P. Simpson, Leamington.

Set of 11 Tabulated Phonetic Alphabet Charts.

Class 9.—Drawing Models, &c.

Set of Drawing Models. (Department of Science and Art.)
Set of Geometrical Drawing Models.
Model of Bridge, Door and Steps, Step-Ladder, Gate, Well, House, etc.
Models of Fruit, beautifully colored from nature.
Terra-cotta Models of Fruit, Leaves, etc.
Bail's Drawing Charts (set of 19.)

Selby & Co., Toronto.

(See School Furniture.)

Primary Drawing Models, Canadian Drawing Models, Geometrical Figures.

Class 10.—Music.

R. S. Williams & Son, Toronto.

Public School Cabinet Organ, solid black walnut case, three and quarter octaves, having one set of reeds thoroughout, with double bellows, two blowing pedals and knee swell.

This instrument is sufficiently powerful for out-door exercises, or for any ordinary schoolroom, and is so light that it can be carried from room to room by a child ten years of age.

Public and High School Piano, walnut oil finished case.

Canada School Publishing Company, Toronto.

(See also Text-Books and Drawing.)

Tuft's and Preston's Public School Music Reader.
Tuft's and Preston's High School Music Reader.
Normal Music Course, first series (20 large charts printed on both sides.)

Class 11.—Geography and Astronomy.

Topographical Illustrations—Terrestrial Globes :—

30-inch Terrestrial Globe.
18-inch do bronze pedestal stand.
12-inch do bronze frame.
6-inch do brass frame.
5-inch Terrestrial Hemisphere Globe.
3-inch do do.

Raised and Physical Globes :—

12-inch Physical Globe.
15-inch Raised Globe.
18-inch do

Maps, etc :—

Johnston's England, Ireland, Scotland, British Isles and Australia.
Nelson's British America, Palestine and Lands of the Bible.
Departmental Maps of Palestine and Bible Lands.

Raised Maps :—

North America.
Map of Europe.
Map of Italy.
Greciæ Antiquæ.

Map and School Supply Company, Toronto.

School Maps (see also Apparatus and School Furniture Departments)—Europe, Asia, Africa, America, Dominion of Canada and Ontario.
Map Case containing 5 Maps.

Canada School Publishing Company, Toronto.

Hughes' Railway Map of Ontario.

Astronomical Illustrations—Celestial Globes, Orreries, etc:—

18-inch Celestial Globe.
12-inch Celestial Globe.
Solar Telluric Globe.
Juvet's Time Globe.
Ginn's 6-inch Astronomical Globe.
Swain's Planetarium.
Planetarium High Stand.
Planetarium Low Stand.
Brass-ground Tellurian.
The Heliotellus.
The Lunatellus.
Tide Dial.
Bailey's Astral Lantern.
Astronomical Lantern.

Selby & Co., Toronto.

Newtonian or Astronomical Globe.

Astronomical and Physical Maps and Charts:—

Johnston's Solar System.
do Astronomical Diagrams.
Astronomical Charts (set of 16.)
Drew's Astronomical Charts (set of 12.)
Reynolds' Astronomical Geography.
do Chart, Distribution of Rain.
do Principal Rivers of the World.
Guizot's Mural Map of North America.

Class 12.—Chronology.

Chronological Chart of Ancient History.
Genealogical and Chronological Chart of the History of England.
Genealogical Chart of the Sovereigns of England, showing their respective titles to the Crown.
Historical Chart, showing the rise, progress, and decline of Commercial Nations, 1506 B. C. to A. D. 1870.
Merritt's Historic Tree of British North America.
Nasmith's Chronometrical Chart of the History of England.
Genealogical Tree of the Royal Family of Great Britain.

Class 13.—Ethnography.

Portrait Busts of Distinguished Canadians (from the Educational Museum):—

Marquis of Lorne, Governor-General of Canada from 1878 to 1882,
His Honor John Beverley Robinson, Lieutenant-Governor of Ontario, born 1820.
Right Hon. Sir John A. Macdonald, G.C.B., Premier of Dominion of Canada, born 1815.
Hon. Oliver Mowat, Q.C., Premier of Ontario, born 1820.
Hon. George Brown, Senator, born 1818, died 1880.
Sir Francis Hincks, K.C.M.G., born 1807, died 1885.
Hon. T. D'Arcy McGee, M.P., born 1825, died 1868.

Rev. Egerton Ryerson, D.D., L.L.D., Chief Superintendent of Education, born 1803, died 1880.
Hon. Adam Crooks, first Minister of Education for Ontario, born 1827, died 1886.
Right Reverend John Strachan, D.D., L.L.D., first Bishop of Toronto, born 1778, died 1867.
Portraits of Indians (set of 58, colored.)

Class 14.—Anatomy and Physiology.

Models :—

Manikin—a model of the Human Body, showing both external and internal structure.
Thorax, showing organs of circulation, respiration, etc.
Head and Neck (3 models).
Brain (4 models).
Ear, enlarged, showing its structure.
Lower Jaw, enlarged, showing teeth, nerves, arteries, etc.
Skin, enlarged, showing epidermis, perspiratory glands, arteries, nerves, etc.
Heart, enlarged and movable, showing valves, etc.
Tongue and Epiglottis.
Larynx (2 models).
Bones of Foot, Hand, Elbow Joint- Shoulder Joint, Knee Joint, and Hip Joint.

Anatomical and Physiological Charts :—

Fiedler's Anatomical Charts (set of 4).
Marshall's Physiological Diagrams (set of 9).
Johnston's Anatomical and Physiological Charts (set of 2).

Class 15.—Zoology.

Audubon's Animals of North America (chiefly of the natural size) beautifully colored from nature, with common and technical names.

Zoological Diagrams :—

Patterson's Zoological Diagrams (set of 10).
Johnston's Illustrations of Natural History (set of 5).
Redfield's General View of the Animal Kingdom.
Simonson's Circular Zoological Chart.
Hawkins' Extinct Animals (set of 5).
Christian Knowledge Society, Comparative sizes of Animals.

Normal and Model Schools, Ottawa.

Collection of Corals.

Class 16.—Botany.

Botanical Charts :—

Henslow's Botanical Charts.
Departmental Set of Botanical Plates.
Johnston's Botanical Charts.
Vegetable Kingdom—Flowering plants or Phanerogamia, and Flowerless Plants or Cryptogamia (set of 70).
Apparatus for Collecting Plants.
Set of 45 Colored Botanical Plates to illustrate Order Orchidaceæ.

Set of 28 Models of Flowers, which can be taken apart to illustrate Physiological Botany.
Set of 90 Object Lessons from Vegetable Kingdom.

Class 17.—Geology and Mineralogy.

Geological Charts :—

Reynolds' Table, showing the order of succession of Stratified Rocks.
Reynolds' Table of British Strata.
Morris's Geological Chart.
Set of Models of Crystals in glass.
Set of Models of Crystals exemplifying the primary forms.

Class 18.—Philosophical Charts.

Johnston's Philosophical Charts (set of 7).

Class 19.—Physical and Chemical Apparatus.

Matter, Force, and Motion :—

Mercury Tube and Cup for Porosity.
Inertia Apparatus.
Apparatus for illustrating Curvilinear Motion,
Bent Lever.
Double Inclined Plane.
Collision Balls.
Model of Screw.
Model of Lock.
Gyroscope.
Centrifugal Machine.
Set of Mechanical Powers.

Gravitation and Molecular Attraction :—

Centre of Gravity Apparatus.
Physical and Chemical Balance, in glass case.
Guinea and Feather Apparatus.
Coulomb's Torsion Balance.

Hydrostatics :—

Haldat's Liquid Pressure Apparatus.
Equilibrium Tubes.
Capillary Tubes.
Apparatus to illustrate Spouting of Fluids.
Hydraulic Ram.
Hydraulic Press with lever.
Bramah Press.
Cartesian Divers.
Hydrometers.
Specific Gravity Flasks.
Model of Archimedes Pump.
Under and Overshot Wheel.

Properties of Gases :—

Air Pump with two glass cylinders, syphon gauge, and bell glass receiver, mounted on a table.
Air Pump with brass cylinder.
Condensing Syringe.
Copper Globe for Exhaustion to form Fountain.
Model of Suction or Lifting Pump.
Model of Force Pump.
Magic Funnel.
Transfer Jar for Exhaustion under Bell Glass.
Fountain in Vacuo, with Jet, etc., for producing an Artificial Fountain.
Magdeburg Hemispheres.

Daniell's Hygrometer.
Reynolds' Chart of Barometer.
Marriotte and Boyle's Instrument for Measurement of the Elastic Forces of Gases.
Apparatus for Mixture of Gases and Liquids.

Acoustics:—

Bell in Glass Globe to show that sounds are not produced in vacuo.
Sliding Rod and Ball, with Glass Receiver.
Water Hammer.

Heat: (see also Chemical Apparatus):—
Tyndall's Apparatus—Multiplying Wheel.
Ingenhouz's Apparatus.
Tyndall's Apparatus to show Unequal Expansion of Metals.
Gravesande's Ball and Ring Pyrometer.
Ferguson's Pyrometer.
Wollaston's Cryophorus.
Differential Thermometer.
Gridiron Pendulum.
Franklin's Experiment (Pulse Glass).
Radiometer.
Psychrometer (Wet Bulb Thermometer).
Thermo-electric Battery or Pile.
Mellom's Thermo Multiplier with concave reflector.
Concave Reflectors.
Model of Locomotive Engine.
Model of Beam Engine and Boiler.
Miniature Working Model of Steam Engine.

Light:—
Large Binocular Microscope with movable diaphragm, fine adjustment, two sets of eye-pieces, nine objectives, achromatic condenser, rotating prism, etc., etc.
Public School Microscope for Botanical purposes.
Magic Lantern with 3½-in. lenses.
Polarising Apparatus for Magic Lantern.
Solar Lantern.
Photogenic Lantern for Electric Light Apparatus.
Condensing Lenses.
Terrestrial Telescope on Stand.
Davey's Safety Lamp.
Revolving Disc for Decomposition of Light.
Camera Obscura.
Kaleidoscope.
Oxy-hydrogen Lamp.

Magnetism:—
Inclination Compass for Measuring the Magnetic Inclination or Drop.
Horse-shoe Magnets.

Frictional Electricity:—
Carre's Electrical Machine.
Plate Electrical Machine.
Holtz's Electrical Machine.
Electrophorus, glass handle.
Electric Battery of Leyden Jars.
Electrical Discharger, Electrical Plate, Electrical Orrery, Electrical Sportsman, Electric Egg, Electrical Vane, Electric Head of Hair, Electric Pistol.

Cuthbertson's Balance Electrometer.
Dancing Image Plates.
Glass Globe for Dancing Images.
Coulomb's Ellipsoid (see Heat).
Apparatus for Light in Vacuo.
Illuminated Egg Stand.
Globe for Electric Spark.
Diamond or Luminous Jars.
Leyden Jars.
Spiral or Spotted Tubes.
Harris's Unit Jar.
Thunder House.

Dynamical Electricity :—

Bunsen's Battery.
Carbon Battery.
Grove's Battery.
Smee's Battery.
Decomposition of Water Apparatus.
Electric Magnetic Bell.
Electric Pump.
Electro-magnetic Machine.
Electrotyping Apparatus.
Geissler's Tubes.
Apparatus for revolving Geissler's Tubes.
Mirror for Geissler's Tubes.
Hoffman's Apparatus for Electrolysis.
Helix and Bar.
Large Ruhmkorff Coil.
Commutator or Contact Breaker for ditto.
Ruhmkorff Coil with commutator.
Oersted's Galvanometer.
Stand for Carbon Points for Electric Light.
Revolving Electro Magnet.
Revolving Armature and Magnet.
Model of Electric Telegraph with index.
Model of Electric Telegraph for Sound.
Home and School Telegraph.
Telegraph with Paper Reel.
Mariner's Compass.

Chemistry :—

School Laboratory.
Apparatus for Experiments with Gases.
Apparatus for applying Heat.
Miscellaneous Chemical Apparatus.

Map and School Supply Company, Toronto. (See also School Furniture and Map Departments.)

Public School Air Pump.
Bell Glass for ditto.
Air Pump with 6-inch plate.
Bell Glass for ditto.
Guinea and Feather Apparatus.
Magdeburg Hemispheres.
Model of Lifting Pump.
Model of Force Pump.
Ramsden's Electrical Machine.
Leyden Jars.
Spiral or Spangled Tubes.
Electrical Discharger.
Dancing Image Plates.
Electrical Flier.
Electrical Pendulum.
Insulating Stool.
Electrolysis Apparatus.
Induction Cylinders.
Gyroscope.
Archimedes Principle.
Conductometer.
Ball and Ring Pyrometer.

Class 20—Pupils' Work—Kindergarten.

Pupils' Work.—*Provincial Model School, Toronto.* Conducted by Miss Hailman.

Beads (Miss Hailman's 2nd gift) :—Examples to show Color, Form, Color and Form.

Chains :—Examples in Straws, Papers and Links.

Stick-laying :—Examples of same.

Parquetrie :—Examples of Tablet-laying.

Folding—Forms of Cognition :—Examples of Square Folding (1st School); Oblong Folding (2nd School); Triangular Folding (3rd School); Geometrical Folding; Groups of Geometrical Folding.

Weaving Mats :—Examples to illustrate Color, Form, Color and Form.

First Steps in Invention (Miss Hailman's Baby Mats.)

Cutting and Pasting:—Simple School, founded on square inches.

Sewing:—Set of Bradley's Sewing Cards.

Freehand Weaving:—Examples of Cards and Baskets.

Interlacing:—Examples of Interlacing,

Kindergarten Work, Toronto Public Schools.

I. Exhibit of Training Class, conducted by Mrs. James L. Hughes.

	Specimens
Paper Cutting and Pasting—(*a*) Designs from the Square	20
(*b*) " " Hexagon	20
Free Cutting	5
Mat Weaving—(*a*) Regular Weaving	40
(*b*) Original Symmetrical Patterns	9
(*c*) Woven Pictures	9
Sewing—(*a*) Picture Sewing	9
(*b*) Symmetrical Designs	9
Paper Folding—One-inch square Foldings, grouped to form a Tea Set.	5
Paper Interlacing	20
Perforating—Embossed Designs	16

II. Children's Work.

Mat Weaving—(*a*) Counting Patterns	24
(*b*) Form Patterns	12
Free Weaving	20
Paper Folding	21
Sewing—Picture Cards	30
Perforating—(*a*) Picture Outlines	20
(*b*) Symmetrical Designs	9

CLASS 21.—PUPILS' WORK—PUBLIC AND SEPARATE SCHOOLS.

(Number of Schools in operation, 5,316.)

This section of the Catalogue represents the ordinary work done by children from 7 to 14 years of age in the following departments:—

Writing:	Specimens of general work of	416,588	pupils.
Arithmetic:	" "	422,076	"
Geography:	" Map Drawing of	280,953	"

Map Drawing is taught simultaneously with the Text-Books in Geography,

Drawing: Specimens of Drawing-Books and Drawings, general work of 245,821 pupils.

The names of Schools only are given; for details see Special Catalogue.

I.—COUNTIES.

Brant Co. (Pupils' Work).
Mount Pleasant.

Carleton Co. (Pupils' Work).
S.S. 2 Goulbourn.
S.S. 4 Goulbourn.
S.S. 4 Gower, N.
S.S. 5 Huntley.
S.S. 3 Nepean.
S.S. 4 Nepean.

Dundas Co. (Pupils' Work).
S.S. 1 Inkerman.
S.S. 9 Matilda.
S.S. 7 Mountain.
S.S. 18 Mountain.
S.S. 4 Williamsburg.
S.S. 9 Williamsburg.
S.S. 12 Williamsburg.
S.S. 22 Williamsburg.

I.—Counties.—*Continued,*

Dundas Co. (Pupils' Work).
S.S. 1 Winchester.
S.S. 2 Winchester.
S.S. 4 Winchester.
Durham Co. (Pupils' Work).
S.S. 2 Cavan.
Essex Co. (Pupils' Work).
S.S. 2 Colchester, N.
S.S. 2 Colchester, S.
S.S. 4 Gosfield.
S.S. 2 Malden.
Frontenac Co. (Pupils' Work).
S.S. 7 Portland.
Halton Co. (Pupils' Work).
S.S. 6 Esquesing.
S.S. 10 Esquesing.
S.S. 11 Esquesing.
S.S. 5 Nassagaweya.
S.S. 6 Nelson.
S.S. 12 Nelson.
S.S. 5 Trafalgar.
S.S. 10 and 18 Trafalgar.
S.S. 11 Trafalgar.
S.S. 14 Trafalgar.
Haldimand Co. (Pupils' Work).
S.S. 6 Caledonia.
S.S. 2 Canboro'.
S.S. 5 Cayuga, S.
Decewsville.
S.S. 2 Dunn.
S.S. 4 Dunn.
Hagarsville.
S.S. 2 Moulton.
S.S. 6 Seneca.
Springvale.
S.S. 1 Walpole.
S.S. 6 Walpole.
S.S. 16 Walpole.
York.
Hastings Co. (Pupils' Work).
Plainfield.
S.S. 6 Sidney.
S.S. 11 Thurlow.
Huron Co. (Pupils' Work).
Blyth.
Kent Co. (Pupils' Work).
S.S. 2 Chatham
S.S. 7 Chatham.
S.S. 12 Chatham.
S.S. 2 Dover.
S.S. 13 Dover.
S S. 7 Raleigh.
S.S. 9 Raleigh.
S.S. 1 Romney.
S.S. 3 Romney, N.

Kent Co. (Pupils' Work).
S.S. 2 Tilbury, E.
S.S. 4 Tilbury, E.
Lambton Co. (Pupils' Work).
S.S. 2 Euphemia.
S.S. 2 Warwick.
Lanark Co. (Pupils' Work).
Fullbrook.
Leeds (Pupils' Work).
Delta.
Farmersville.
Lennox and Addington Cos. (Pupils' Work).
Big Creek.
S.S. 3 Camden.
S.S. 6 Camden.
S.S. 4 Ernestown.
S.S. 6 Ernestown.
Hamburg.
Millhaven.
Morven.
Napanee Mills.
Odessa.
Lincoln Co. (Pupils' Work).
S.S. 7 Caistor.
S.S. 2 Gainsboro'.
S.S. 10 Gainsboro'.
S.S. 5 Grantham.
S.S. 2 Louth.
S.S. 3 Louth.
S.S. 4 Louth.
S.S. 4 Niagara.
S.S. 6 Niagara.
Middlesex, E., Co. (Pupils' Work).
S.S. 3 Biddulph.
S.S. 4. Dorchester.
S.S. 19 London.
S.S. 22 London.
S.S. 2 Nissouri, W.
Odell's, Westminster.
Oneida Indian School.
S.S. 2 Westminster.
S.S. 17 Westminster.
Norfolk Co. (Pupils's Work).
Waterford.
Ontario Co. (Pupils' Work).
S.S. 4 Mara.
Manilla.
S.S. 1 Whitby, E.
Prince Edward Co. (Pupils' Work).
S.S. 10 Ameliasburg.
S.S. 2 Athol.
S.S. 5 Athol.
Consecon.
S.S. 10 Hillier.

I.—Counties—*Continued.*

Prince Edward Co. (Pupils' Work).
S.S. 2 Marysburg, N.
Milford.
Renfrew Co. (Pupils' Work).
S.S. 2 Algona, N.
S.S. 3 Algona, S.
S.S. 1 Alice.
S.S. 6 Alice.
S.S. 3 Bagot.
S.S. 5 Bagot.
S.S. 2 Bromley.
S.S. 2 Brudenell.
Forester's Falls.
S.S. 2 Grattan.
S.S. 8 Grattan.
S.S. 2 Horton.
S.S. 10 McNab.
S.S. 13 McNab.
S.S. 2 Petawawa.
Rankin.
Rockingham.
S.S. 4 Ross.
S.S. 9 Ross.
Simcoe Co. (Pupils' Work).
S.S. 1 Adjala.
S.S. 5 Adjala.
S.S. 6 Adjala.
Bondhead.
S.S. 1 Essa.
S.S. 4 Essa.
S.S. 5 Essa.
S.S. 6 Essa.
S.S. 8 Essa.
S.S. 10 Essa.
S.S. 11 Essa.
S.S. 15 Essa.
S.S. 1 Gwillimbury, West.
S.S. 4 Gwillimbury, West.
S.S. 16 Gwillimbury, West.
S.S. 6 Innisfil.
S.S. 8 Innisfil.
S.S. 10 Innisfil.
S.S. 11 Innisfil.
S.S. 13 Innisfil.
Simcoe Co. (Pupils' Work).
S.S. 1 Medora.
S.S. 4 Tecumseth.
S.S. 8 Tecumseth.
S.S. 9 Tecumseth.
S.S. 17 & 13 Tecumseth and Essa.
S.S. 2 Tossorontio.
Tottenham.
S.S. 1 Watt.
Waterloo Co. (Pupils' Work).
S.S. 19 Dumfries, N.
S.S. 25 Dumfries, N.
S.S. 5 Waterloo.
S.S. 17 Waterloo.
Welland Co. (Pupils' Work).
Port Robinson.
Wellington Co. (Pupils' Work).
S.S. 3 Eramosa.
S.S. 13 Erin.
S.S. 1 Garafraxa, W.
S.S. 9 Garafraxa, W.
Glenallan.
S.S. 1 Guelph.
S.S. 4 Guelph.
S.S. 4½ Guelph.
S.S. 6 Guelph.
S.S. 1 Luther West and Garafraxa W.
S.S. 12 Minto.
Parker.
S.S. 4 Pilkington.
S.S. 5 Pilkington.
S.S. 1 Puslinch.
S.S. 2 Puslinch.
S.S. 4 Puslinch.
Salem.
Speedside.
York Co. (Pupils' Work).
S.S. 4 Gwillimbury, E.
S.S. 4 King.
Pottageville.
S.S. 3 Vaughan.

II.—Cities (Pupils' Work).

Belleville.
Brantford Central Sch.
Hamilton.
London Sep. Sch.
Ottawa Sep. Sch.
St. Catharines Sep. Sch.
Stratford.
Toronto.
Toronto Sep. Sch.

III.—Towns (Pupils' Work).

Amherstburg.
Brockville.
Berlin.
Listowel.
Milton.
Napanee.

III.—Towns (Pupils' Work)—*Continued.*

Bowmanville.
Bowmanville Union Sch.
Blenheim.
Barrie.
Brampton.
Chatham Central Sch.
Cornwall Sep. Sch.
Newmarket.
Pembroke.
Port Hope.
Picton.
Port Hope.
Port Hope Union Sch.
Trenton.

IV.—Villages (Pupils' Work).

Alliston.
Arnprior.
Bath.
Burlington.
Caledonia.
Carleton Place.
Drayton.
Dunnville.
Fergus.
Gananoque.
Gravenhurst.
Hespeler.
Iroquois.
Leamington.
London West.
Newcastle.
Newboro'.
Preston.
Port Dalhousie.
Richmond.
Stirling.
Uxbridge.
Wellington.

Provincial Normal and Model Schools (Pupils' Work).

Toronto Normal School.
Do Model School.
Ottawa Normal School.
Do Model School.

High Schools and Collegiate Institutes (Pupils' Work).

Aylmer.
Belleville.
Bradford.
Brockville.
Caledonia.
Chatham.
Fergus.
Gananoque.
Hamilton.
Kemptville.
Kincardine.
London.
Morrisburg.
Orangeville.
Owen Sound.
Parkhill.
Port Perry.
Port Dover.
Picton.
St. Thomas.
St. Mary's.
Stratford.
Strathroy.
Streetsville.
Whitby.
Woodstock.

PART II.

MECHANICS' INSTITUTES.

Specimens of Examination Papers on Drawing, from the following Mechanics' Institutes:—

Aurora.	Goderich.	Prescott.
Ailsa Craig.	Guelph.	Preston.
Almonte.	Kemptville.	Penetanguishene.
Arnprior.	Mount Forest.	Richmond Hill.
Barrie.	Milton.	St. Catharines.
Brantford.	Midland.	Schomberg.
Berlin.	Mitchell.	St. George.
Blyth.	Newmarket.	St. Mary's.
Brockville.	Napanee.	Seaforth.
Carleton Place.	Orangeville.	Stouffville.
Cheltenham.	Orillia.	Smith's Falls.
Claude.	Paris.	Strathroy.
Durham.	Parkhill.	Stratford.
Elora.	Perth.	Streetsville.
Galt.	Peterboro'.	Whitby.
Garden Island.	Port Perry.	Woodstock.
Georgetown.		

Association of Mechanics' Institutes for Ontario.

W. Edwards (Secretary of Association), Toronto.

Roll and Record Books.—Accession Books.

Carleton Place Mechanics' Institute.

Pupils' Work.—Machine Drawing, etc.

Lacey R. Johnson, Carleton Place.

Working Model of English Locomotive Engine, made to scale of one inch to the foot.

A. Parker, Carleton Place.

Ornamental Inlaid Wood Table.

Jas. McVety, Carleton Place.

Model of Dwelling House or Shanty, as built by the early settlers in Canada.

Guelph Free Library.

J. O'Brien, and students, Guelph.

Ornamental Carving in Wood.

Garden Island Mechanics' Institute.

Archd. Cumming, Garden Island.

Working Model of a Harbour Tug Steam Engine.

Anthony Malone, Garden Island.

Model of a Dram of Timber, as prepared for running the Rapids of the River St. Lawrence.

Galt Mechanics' Institute.

Machine Drawing.

Milton Mechanics' Institute.

Freehand Drawing.

Port Perry Mechanics' Institute.

Freehand Drawing.
Linear Perspective.
Practical Geometry.
Geometry and Perspective.
Mechanical Drawing.
Shading from the flat.

Whitby Mechanics' Institute.

Freehand Drawing-
Perspective.
Shading from the round.
Outline from the round.

Mechanics' Institutes and Branch Art Schools.

Reynolds' Chart of Condensing Steam Engine, Locomotive Engine, Oscillating Marine Engine, Marine Engine, Marine Paddle Engine, Marine Screw Engine, High Pressure Engine, Coal Mining, Cotton Plant and its Cultivation, Distilling, Electric Telegraph, Fire Engine, Flour Mill, Gas Metre, Hydraulic Press, Paper Machine, Printing Machine, Pumps, Mechanism of Clocks, Mechanism of Watch, Manufacture of Coal Gas.

Mabrun's Turbine Wheel.

Examples of Machine Details (set of 16). Department of Science and Art.

Sopwith's Surveying Diagrams.

PART III.

ART SCHOOLS.

Ontario School of Art, Toronto.

Freehand Drawing.
Drawing from Models.
Practical Geometry.
Linear Perspective.
Industrial Design.
Design for Paper Hanging—
Competitions for a Silver Medal, presented by the Ontario Manufacturers' Association.
Machine Drawing.
Architectural Drawing.
Shading from the Flat.
Charcoal from Life.
Shading from Antique.
Water Colors.
Oil Paintings.
Chasing in Brass.
Repoussé Work.
Sculpture in Marble.
Electro-metallurgy.
Modelling in Clay, and Plaster Casts from Clay.
Carving in Wood.

London Art School.

Specimens of Elementary Papers—
Grades, A. & B.
Machine Drawing, etc.
Industrial Designs (Original).
Shading from Casts.
Crayon Drawings from the flat.
Pen and Ink Drawing.
Oil Painting.
Water Colors.
Models in Clay and Plaster.
Models in Clay.
Plaster Models.
Paintings on China.

Ottawa Art School.

Specimens of Examination Papers in Grades A. & B.
Freehand Drawing.
Mechanics' Practical Geometry.
Practical Perspective Diagrams.
Mechanical Drawing.
Original Industrial Designs.
Industrial Designs—Competitions for Silver Medal offered by the Ontario Manufacturers' Association.
Shading from the "Round."
Life Studies.
Water Colors.
Oil Paintings.

Ottawa Normal School.

R. H. Whale.

Oil Painting, "Kirby Mill."

Kingston Art School.

Specimens of Examination Papers in Grades A. & B.
Perspective.
Architectural Drawing.
Mechanical Drawing.
Original Designs for Industrial uses.
Designs for Oil Cloth in Competition for a Silver Medal, presented by the Ontario Manufacturers' Association.
Shading from the "Flat."
Anatomical Figures.
Outline from the "Round."
Shading from the "Round."
Shading—Still Life.
Flower Drawing.
Water Colors.
Oil Paintings.

PART IV.

INSTITUTIONS FOR THE EDUCATION OF THE BLIND AND DEAF AND DUMB.

Ontario Institution for the Education of the Blind, Brantford.

Historical and Statistical.

Chart explaining the History and Statistics of the Institute.
Form of Application.
By-Laws.
Rules and Regulations.
Where it is, What it is, and What it does.
Annual Reports, 1882-3-4-5.

Photographs.

View of Buildings.
View of Buildings and grounds.
A Piano Lesson.
A Tuning Lesson.
A Knitting Class.
A Sewing Class.
Willow Work Shops.

Appliances for Teaching.

Reading and Writing.
Point Print Slate.
Embossed Book in Line Type.
Embossed Book in Point.
Embossed Book in Point Print.
Grooved Writing Cards.

Physiology and Natural History.

Cast of Human Leg.
Stuffed Pouched Gopher.
Stuffed Ground Hog.
Stuffed Prairie Hen.
Stuffed Grakle.
Stuffed Black Bass.

Willow Work Models.

Chair, Basket, etc.

Pupils' Work.

Reading and Writing.
Embossed Book transcribed in Point Print.
Specimens of Writing with Grooved Cards.
Willow Work.
Crochet Work.
Bead Work.
Machine and Hand Sewing.
Machine Knitted Goods.
Hand Knitting.

Ontario Institution for the Education of the Deaf and Dumb, Belleville.

Statistical Chart.

Photographs.

Deaf and Dumb Institute.
Deaf and Dumb Institute, with Pupils.
Boys Learning Shoemaking.
Football Club.
Pantomime Club.
Pantomime Club
Superintendent and Officers.
Superintendent's Residence.

Text-Books.

Readers.
Arithmetic.
History.
Geography.
Natural Philosophy.
Religious Instruction.

Pupils' Work.

Crayon Drawings.

PART V.

COLLEGES OF AGRICULTURE AND VETERINARY SCIENCE.

Ontario Agricultural College and Experimental Farm, Guelph, Ontario.

Geology.

Specimens illustrating the Geology of the Province of Ontario, used for teaching purposes.

Laurentian Series.
Huronian Series.
Cambrian Series.
Silurian Series.
Devonian Series.
Pleistocene.

Rocks which chiefly compose the Earth's Crust.
Minerals which constitute the majority of Rocks.
Animals which have influenced the Formation of Soil.

Mineralogical Collection.

Specimens used for purposes of reference in the Museum.
Native Elements.
Sulphides and Arsenides.
Chlorides and Fluorides.
Silicates.
Phosphates, Nitrates, Borates, and Tungstates.
Sulphates.
Carbonates.
Hydro-Carbons.

Botany.

Specimens illustrating Systematic and Economic Botany, used for teaching purposes.

Zoology.

Model of a Horse, showing internal structure.
Model of a Cow, showing internal structure.
Head of Devon Steer, fed at the farm, aged four years, weighed 1,960 lbs.
Head of Prince Albert Windsor Boar, purchased from Her Majesty the Queen, 1876, aged four years, weighed 410 lbs.
Collection of Insects injurious to Vegetation—1 to 11, Apple; 12 and 13, Pear; 14 to 17, Plum; 18 to 22, Cherry; 23 and 24, Cabbage; 25, Tomatoes; 20 to 32, Grape; 33, Currant; 34, Pea; 35, Potatoes.
Collection of Coleoptera.
" Hymenoptera.
" Lepidoptera.

Agricultural Seeds in Bottles.

Barley.	Beans.	Clover Seed.
Wheat.	Peas.	Millet.
Rye.	Timothy Seed.	Carrot Seed.
Oats.		

Chart showing history and progress of the Institution.
" plan of experimental field plots.
" plan of Farm.
" plan of Arboretum Planting, etc.
" Food in Cattle life, ten years at the farm.
" Milk per season, an estimate, 12 cows.
" Chemical analysis of Milk, 11 cows.
" Cream per cent., 11 cows.
" Butter Globules, result of 21 Microscopic observations at farm, 12 cows.
" Butter per 100 lbs., Milk and Cream, 11 cows.
" Cheese per 100 lbs., Milk and Cream, 11 cows.
" Farmers' Institutes held throughout the Province.
Photograph of Building.
Reports, etc.
Ontario Agricultural Commission, 1881, four vols.
Dairymen's Association.—Reports, etc.
Reports of the Fruit Growers' Association, and Entomological Society of Ontario, 1882.
Annual Reports of the Entomological Society, 1879-84.

Ontario Veterinary College, Toronto, Ontario.

Principal, A. Smith, V.S.

(In connection with the Agricultural and Art Association.)

Photographs.

View of College.
Dissecting Rooms.
Operating Room.
Operating Room with Students.
Portraits of 90 Senior Students, 1884-5.
Portraits of Senior Students and Professors, 1886.

PART VI.

SCIENTIFIC SOCIETIES, COMMERCIAL COLLEGES, Etc.

School of Practical Science, Toronto. Established 1877.

Photograph of Building.
Specimens of Drawing from the Department of Engineering.

1st Year.

Descriptive Geometry.
Orthographic Projection.
Surveys.
Graphics.
Machine Drawing.
Construction Copies.

2nd Year.

Descriptive Geometry.
Copies.
Practice Sheets.

3rd Year.

Descriptive Geometry.
Orthographic Projection.
Perspective Projection.
Stone Cutting.
Surveys.
Constructive Design.
Copies.

Institute Canadien Français, de la cité d'Ottawa.

Crayon Drawings.
Indian Ink and Pencil.
Mechanical Drawing.
Architectural and Masonry.
Linear Drawing.
Perspective.
Map Drawing.
Fancy Lettering.
Penmanship.

Meteorological Observatory, Toronto.—Photograph of Buildings.

Brockville Business College, Brockville, W. C. Austin, Principal.

Theory and Actual Business Department.
Test Books.
Students' Work.
Samples of the Money and Merchandise used by Students in the Actual Business Department of the College.

Canada Business College, Hamilton, R. E. Gallagher, Principal.

Business Penmanship.
Off-hand Flourishing.

Northern Business College, Owen Sound, Ontario, C. A. Fleming, Principal.

Specimens—Ornamental Penmanship.
Pen and Ink Sketch, showing how to obtain Practical Education.

PART VII.

UNIVERSITIES, COLLEGES, SCHOOLS OF MEDICINE, Etc.

Albert University, Belleville.—Photograph of Buildings.

Victoria University, Cobourg.—Photograph of Buildings.

Kosmos (V. P. Journal), published by the Science Association of the College.
Acta Victoriana, a Monthly Journal published by the Literary and Jackson Societies.

Toronto University, Toronto.—Photograph of Buildings.

University Trinity College, Toronto.—Photograph of Buildings.

Upper Canada College, Toronto.—Pupils' work. Photograph of Buildings.

Trinity College, Port Hope.—Photograph of Buildings.

Wycliffe College, Toronto.—View of Buildings.

Knox Presbyterian College, Toronto.—Photograph of Buildings.

Demill Ladies' College, Oshawa.—Painting of Buildings.

Alma Ladies' College, St. Thomas.

Pupils' Work.
Freehand from Flat Copy.
Linear Perspective.
Geometry.
Shading from Antique.
Outline from the Round.

Ontario Ladies' College, Whitby.

Photograph of Building.
Pupils' Work.
Freehand Drawing.
Original Designs.
Shading from the Flat.
Water Colors.

Brantford Ladies' College, Brantford.

Photograph of Building.
Pupils' Work, Oil Paintings.

Hamilton Ladies' College, Hamilton.

Photograph of Building.
Pupils' Work.
Oil Paintings.

Woodstock Ladies' College, Woodstock.

Art Department.
Pupils' Work.
Oil Paintings.
Water Colors.
Plain Crayons.
Pastel Crayons.

Loretto Abbey, Toronto.

Photograph of Building.
Pupils' Work.
Oil Paintings.
Oil on Velvet.
Water Colors.
Crayon Drawing.
Embroidery.
Wax Work.

Loretto Convent, Hamilton.

Pupils' Work.
Oil Painting on China.
Water Colors.
Modelling in Clay.
Satin Stitch and Applique Work.
Honiton Lace.

Hellmuth Ladies' College, London.—Photograph of Buildings.

Sacred Heart Academy, London.—Lithograph of Buildings.

Loretto Convent, Niagara Falls.—Photograph of Buildings.

St. Joseph's Convent, Toronto.—Photograph of Buildings.

Convent of Notre Dame, Peterborough.—Photograph of Buildings.

SCHOOLS OF MEDICINE, ETC.

Toronto School of Medicine, Toronto.—Photograph of Buildings. Chart of Statistics.
Royal College of Physicians and Surgeons, Kingston.—Photograph of Building.
Ontario Pharmaceutical College, Toronto.—Photograph of Building.

OTHER INSTITUTIONS.

Osgoode Hall, Toronto.—Photographs of Buildings and Library.
De La Salle Institute, Toronto.—Photograph of Building.

In addition to the catalogue a large edition of a pamphlet relating to the Educational system of the Province of Ontario, showing its progress, was distributed at the Exhibition. It contained brief descriptive sketches of the working of the Educational Institutions in Ontario as follows:—

I.—ELEMENTARY SCHOOLS.

1. Kindergartens. 2. Public Schools, including Roman Catholic Separate Schools; with information on the Municipal system as applied to Schools; Public School Trustees and their duties; Public School Inspectors and their duties; County Boards of Examiners and their duties; the Central Committee and its functions; Teachers' Examinations; Certificates to Teachers; Religious Instruction in the Schools, etc.

II.—THE TRAINING OF TEACHERS.

1. County Model Schools, with course of study, etc. 2. Provincial, Normal and Model Schools, their object, course of instruction, etc. 3. Training Institutes, course of study, etc. 4. County Teachers' Institutes, formation and object. 5. Teachers' Reading Course, with list of books recommended, etc. 6. Ontario Teachers' Association.

III.—CLASSICAL SCHOOLS.

1. County High Schools, qualifications of masters, course of study, etc. 2. Collegiate Institutes, how formed. 3. Upper Canada College, Endowment, course of instruction, etc.

IV.—THE UNIVERSITIES.

1. University College, course of instruction, examination, etc. 2. The University of Toronto, its functions, etc.

V.—TECHNICAL SCHOOLS.

1. School of Practical Science, course of study, etc. 2. Ontario School of Art, course of instruction, etc. 3. Ontario Agricultural College and Experimental Farm, its object, department of instruction, etc.

VI.—SCHOOLS FOR SPECIAL CLASSES.

1. Ontario Institution for the Deaf and Dumb, its history and objects, course of instruction, etc. 2. Ontario Institution for the Education of the Blind, its history, etc.

VII.—INSTITUTIONS PARTLY AIDED BY GOVERNMENT.

1. The Canadian Institute, Toronto. 2. Institut Canadien, Ottawa. 3. Mechanics' Institutes, throughout the Province. 4. Ontario Society of Artists, Toronto. 5. Local

Art Schools, Toronto, Ottawa, Hamilton, Kingston and London. 6. Literary and Scientific Society, Ottawa. 7. Hamilton Association. 8. The Entomological Society of Ontario.

VIII.—UNIVERSITIES, COLLEGES, AND SCHOOLS NOT UNDER PROVINCIAL CONTROL.

1. Universities:—Victoria, at Cobourg; Queen's, at Kingston; Trinity College, at Toronto; Ottawa College; Western, at London. 2. Theological Colleges:—Knox, at Toronto (Presbyterian); Huron, at London (Church of England); Wycliffe, at Toronto (Church of England); McMaster Hall, at Toronto (Baptist); St. Michael's, at Toronto (Roman Catholic); Assumption, at Sandwich (Roman Catholic). 3. Classical and Literary Colleges, Etc.:—Albert College, at Belleville; Woodstock College; Trinity College School, at Port Hope; St. Michael's (in part), Toronto. 4. Ladies' Colleges:—Alexandra (department), at Belleville; Alma, at St. Thomas; Bishop Strachan School, at Toronto; Ladies' College, at Brantford; Hellmuth College, at London; Wesleyan Ladies' College, at Hamilton; Ontario Ladies' College, at Whitby; The Ladies' College, at Ottawa; Demill Ladies' College, at Oshawa; Ladies' College, Woodstock (department); Loretto Abbey, Toronto; Loretto Convents, at Hamilton, Lindsay and Niagara Falls; St. Joseph's Academy, Toronto. 5.—Medical Schools, Etc.:—The College of Physicians and Surgeons of Ontario; Toronto School of Medicine; Trinity Medical School, Toronto; Royal College of Physicians and Surgeons, Toronto; College of Pharmacy, Toronto; School of Dentistry of the Royal College of Dental Surgeons, Toronto; Women's Medical Colleges, Kingston and Toronto; Ontario Veterinary College, Toronto. 6. Business Colleges:—At Belleville, 1; Brockville, 1; Chatham, 1; Guelph, 1; Hamilton, 2; Kingston, 1; London, 1; Peterboro', 1; Toronto, 2; Owen Sound, 1.

IX.—MISCELLANEOUS INSTITUTIONS.

1. The Magnetic and Meteorological Observatory, Toronto. 2. Royal Military College, Kingston. 3. The Law Society of Upper Canada. 4. Public Libraries in Ontario.

X.—BENEVOLENT EDUCATIONAL INSTITUTIONS.

1. Shingwauk Home for Indian Boys.
2. Wawanosh Home for Indian Girls, Sault Ste. Marie.

XI.—BENEVOLENT EDUCATIONAL HOMES AND REFORMATORIES.

1. The Boys' Home, Toronto. 2. The Girls' Home, Toronto. 3. The Orphans' Home, Toronto. 4. Industrial School, Toronto. 5. Industrial Refuge for Girls, Toronto. 6. Ontario Reformatory for Boys.

In accordance with your instructions I got 500 copies each of the pamphlet and catalogue bound together in cloth for distribution to H. M. School Inspectors, Clerks of School Boards, etc., throughout the United Kingdom. A copy of the following circular was sent with each book :—

Colonial and Indian Exhibition, 10th July, 1886.

Dear Sir,—I am directed by the Honorable the Minister of Education to send herewith a pamphlet respecting the educational system of the Province of Ontario, Canada, and a catalogue of Exhibits of School Material, Pupils' Work, etc., at the Colonial and Indian Exhibition.

I shall be pleased to meet any of H. M. Inspectors of Schools, Teachers, and Educationists, by appointment; or give any information respecting our Exhibit, or School System, by correspondence.

Yours truly,

S. P. MAY.

Nearly every person to whom the circular was sent acknowledged its receipt, and many of them made appointments to visit the Exhibition during the holidays ; amongst others, letters were received from the Education Department, Whitehall ; H. M. School Inspectors, London, and School Boards in Acton, Ashford, Ariedale, Birmingham, Cambridge, Chelsea, Exeter, Edinburgh, Friston, Guildford, Harrow, Hull, Ipswich, Kent, Liverpool, Manchester, Nottingham, Newcastle, Norwich, Oxford, Richmond, Rochdale, Salford, Wokingham, etc.

The following extracts show that the press took an interest in this scheme. The *Globe* says :—

" The remarkable educational exhibit, which has been sent to South Kensington under the auspices of the Ontario Government, continues to attract the attention it merits from all classes of visitors. Already it has been examined in detail by many educationists, a large number of whom will, however, be freer to spend time in the Court when the summer vacation begins. To bring the exhibit before the notice of these gentlemen, Dr. May has taken a wise step. To official school inspectors, to the principals of the leading schools and colleges, and to clerks of school boards and other similar authorities—numbering in all several hundreds—he has sent a neatly bound volume containing a description of Ontario's Educational System, and a Catalogue of the Exhibits. With this volume, which is 'presented on behalf of the Education Department of Ontario, by the Hon. G. W. Ross and Dr. S. Passmore May,' a special invitation to visit the Court is also forwarded, and an intimation is given that Dr. May will be most happy to furnish personally to such visitors all the information in his power. The invitation will, doubtlessly, be gladly accepted by many of the best-known members of the scholastic profession, and by this means much useful information will be disseminated respecting Ontario's enterprise in a matter which is so closely related to the real welfare of the province."

The *Schoolmaster* remarks :—

" Dr. May will be happy to give every explanation which may be desired for educationists who are anxious to make a personal study of the results as they are displayed in South Kensington ; and, if parties of visitors will communicate with him personally, he will be happy to arrange for a collective guidance and descriptive sketch."

As many of the inspectors and representatives of school boards notified the teachers in their respective districts, that the educational point would be of interest to them during the holidays, a large number of teachers and others concerned in education, accepted my invitation, and I am proud to say that many of them acknowledged the superiority of our educational system, and all of them seemed surprised at the extent and excellence of our exhibit.

Extract from *Press* :—

" The vacation, which is now drawing to a close, has enabled a large number of leading educationists to pay a visit to the Ontario Educational Court. In response to the circular issued by Dr. May, numerous replies have been received from all parts of the United Kingdom, and appointments been made with many leading members of the profession, for a careful examination of Ontario's exhibit. Without an exception, these experts have all pronounced themselves as much pleased and surprised at the evidence afforded of Ontario's educational progress, and especially with the excellent display of appliances for teaching, and the character of the specimens of work done by the pupils."

OPINIONS OF THE BRITISH PRESS ON THE EDUCATIONAL EXHIBITS OF ONTARIO.

As it would occupy too much space to insert all the lengthy articles referring to our exhibits by the press, I shall confine myself to extracts from them, giving first a few of the notices relating to the general, and afterwards those which refer to special exhibits, in the order of classification in the catalogue.

In a series of articles on the Canadian section of the Exhibition, the *Times* notices the educational exhibit of the Dominion. The writer remarks :—

" Canada has already produced a very creditable national literature, notably in History and Science. As the section devoted to education and instruction shows, Canada has an excellent

system of national education. The Ontario Section has been admirably arranged by Dr. Passmore May, the Commissioner in charge of the education exhibits of that province, and would require an article to itself to do it justice. There is much historical and statistical material showing the progress and present condition of education ; exhibits illustrative of school methods and organization ; a fair show of photographs of schools, colleges, etc.; school furniture and fittings, some of them highly ingenious ; text books of all kinds ; apparatus used in teaching anatomy and physiology, physics, chemistry, and other subjects ; with abundant specimens of pupils' work in all departments. Then we have exhibits from mechanics' institutes, art schools, institutes for deaf, dumb, and blind, agricultural and other special colleges, universities and the higher institutions. All these are shown and exhibited by the Ontario Government."

In a subsequent article the writer observes :—

"The educational exhibits of Canada deserve more detailed notice than we were able to accord them in our previous articles. In none of the courts is this department of colonial activity so fully represented. As we have already said, the Educational Department of Ontario, under the care of Dr. May, is more fully represented than is the case with any of the other provincial governments. The Ontario educational system has been in working order for many years, and is very completely organized, from the Kindergarten and public elementary schools up through the various training schools for teachers, classical schools, universities, technical schools, special schools, medical and other independent schools, and scientific and literary institutions. All these classes of institutions are well represented in the Ontario Court. In the gallery there are abundant exhibits, showing the working and results of the Kindergarten and elementary schools. In the former the training seems well adapted to educate the eye and the fingers of the little ones, as well as to draw out their budding minds. The specimens of art work, of maps, and exercises of various kinds from the elementary schools would come out well if placed alongside any similar specimens from the schools of this country. The art schools, especially, appear to be doing excellent work, as anyone may see for himself by inspecting the many sketches and models which are exhibited in the Court. The systems in vogue in the institutions for the deaf and dumb, and for the blind, seem particularly well adapted to their purpose ; and the statistics of these institutions on the central screens, as well as the specimens of work and illustrations of method and apparatus in the gallery, are well worth inspecting by those interested in this special department of education. Evidently very great care is bestowed on the training of teachers for the various classes of schools in Ontario. The examinations which they have to undergo are formidable and comprehensive, and for the higher grades quite as formidable as that of the London B. A., and far more varied. Science holds a prominent place in the educational system of Ontario, and the specimens of apparatus in all departments—physics, chemistry, biology—for teaching it are among the prominent exhibits of the Court. The Ontario Agricultural College, established in 1874, is largely represented among the exhibits ; and from them, as well as from the published reports and results, it is evident that the institution affords an admirable training, which must have a highly beneficial influence on the agricultural development of the Dominion. These are only a few of the more evident features of this interesting Court. We must refer those desiring further details to the volume on the 'Educational System of the Province of Ontario," published in connection with the Exhibition.

"Altogether, education in Canada is in a healthy and hopeful condition. There are probably too many degree-granting bodies ; degrees would be much more valuable if they were granted solely by one central university for each province."

The *Schoolmaster*, in a series of articles on the Schools of Greater Britain, describes at length the educational system of Ontario. The following extract is from one of its first articles :—

"In dealing with the educational details of the Dominion, we turn to Ontario, as a matter of course, in the first place. It is in every way the most important section, and on the present occasion is represented with a completeness which befits the occasion. Its Education Department, under the direction of the Hon. Geo. W. Ross, LL.B., M.P.P., Minister of Education, controls the Provincial Normal and Model Schools ; County Model Schools ; Public, Separate and High Schools, and Collegiate Institutes ; also, Upper Canada College, School of Practical Science, University College, Toronto University, Educational Museum, and Art Schools, Mechanics' Institutes, and other institutions receiving Government aid for educational purposes in the Province of Ontario. The fruits of these educational institutions are summarized and illustrated in an excellent display, which has been prepared under the supervision of Dr. S. Passmore May, the Superintendent of Mechanics Institutes and Art Schools.

To the Hon. Mr. Ross and to Dr. May alike, we have to return our sincere thanks for the voluminous information which has been placed at our disposal, and for the personal courtesy which has been displayed at our interviews in the educational section."

The *Morning Post*, in an interesting article on Canada, says :—

"A very remarkable and deeply interesting exhibit is made by the Education Department of the Province of Ontario, Canada, which is arranged in the space between the Canadian Exhibits and the section devoted to New Zealand. Since 1807, when the first legislative enactment was passed, establishing a classical and mathematical school in each of the eight districts in which Upper Canada was then divided, great progress has been made. Year by year the work of educational advancement has been steadily going on, the greatest forward stride being in 1844, when the appointment of the Rev. E. Ryerson, D.D., to the office of Chief Superintendent of Education, gave a great impetus to public education. This gentleman set to work to reconstruct, upon a broader and more comprehensive basis, the system of elementary schools. That now in use may be said to be a combination of the best elements of the systems of several countries—notably, the United States and Germany. All are, however, so blended together and modified that they are no longer foreign, but incorporated as part and parcel of the system of public instruction in Ontario. Dr. Samuel Passmore May, Superintendent of the Mechanics' Institutes and Art Schools, has arranged the display in a manner which reflects greatly upon his judgment and organizing power. The Court is decorated in an artistic manner, and embellished with busts of leading citizens who have devoted themselves in an especial manner to the advancement of education. The Kindergarten system has evidently taken deep root in Canada, and the exhibits are worthy of the attention of those who are interested in this admirable method of facilitating study for children in this country. The fine arts have not been neglected, and there are models, paintings, drawings from the life, casts in bronze, wood carvings, paintings on porcelain, and a variety of other interesting proofs of the zeal which is exercised in Toronto, as elsewhere in Canada, in all that concerns artistic training. Some of the paintings show considerable talent; but the wood-carvings and bronze work are exceptionally excellent. One cannot help thinking when examining the work here displayed, that the importation of a few well-trained Italian teachers of drawing, past masters in the art, such as are to be found in Rome or Florence, and who would willingly emigrate, would prove of inestimable advantage to the young Canadians, who have evidently talent, but which has not always been well developed, possibly from a lack of proper direction. But in all that concerns science and agriculture, no fault can be found. The collection of geological specimens used for teaching purposes are capital, and the photographs for instruction in anatomy are remarkably ingenious, notably so, those which have the veterinary science for their object. The Albert University, Belleville, sends some capital photographs, and the Victoria University several publications of a literary character, which prove that the pupils take interest in all that is of importance in ancient and modern art and history. The Roman Catholic ladies' colleges, which are numerous throughout Canada, excel in the beauty of their laces and embroideries, and evidently devote much attention to the arts of painting on silk and the reproduction of every kind of lace. A good hour could well be passed in this section by all who take interest in educational matters, and those who do so should not fail to pay a visit to Dr. May, and obtain direct from him information, which he is always glad to impart as well as to receive, it being his great object, whilst in England, to obtain from all sources ideas and views calculated to practically improve the educational system of his adopted country."

The following extracts are from the *Canadian Gazette* :—

"THE ONTARIO EDUCATIONAL COURT.

'Education is the glory of Canada.' This is the motto placed above the entry to the Canadian educational exhibits, and no visitor can inspect these exhibits without feeling that the motto is far from a mere idle boast. Everyone knows how important a part education plays in the public life of the Dominion, and in no Province is this more the case than in Ontario.

Ontario's system of public instruction is indeed remarkable, as a combination of the best elements of the systems of several countries. From New York some leading ideas as to the machinery of the schools have been obtained ; from Germany tho system of Normal School training ; from Ireland originally came the principle upon which the series of text-books is based ; and from Massachusetts the system of local taxation upon which the schools are supported. Thus, gathering here a little and there a little, Ontario has succeeded in building up a system which, combining what is best in the leading methods of the old and new worlds, is admirably suited to the exact needs of the country. What those needs are it is hardly necessary to enquire on the face of the industrial development shown in almost every part of the Canadian Section at South Kensington."

"The Ontario Educational Court is itself excellently representative of the advanced position assumed by education in the Province, and its inspection cannot be better undertaken than in company with the excellent descriptive catalogue to the exhibits which Dr. May has been at no little trouble to prepare."

"The whole exhibit is one of the greatest interest, and, let it be added, of the greatest educational value in Great Britain, where many important lessons may be learnt from the excellent system which Ontario has taken such pains to perfect. Ontario, too, may find food for satisfaction; for if, as Jules Simon somewhere tells us, the people that maintains the best organized schools is the greatest people of the world—if not to-day, at least to-morrow—the Province has every reason to regard its future with great hope. It should be added, that under Dr. S. P. May, as Commissioner of Education at the Exhibition, and Superintendent of the Art Schools and Mechanics' Institutes of Ontario, the various exhibits have been arranged with every regard to their relative importance and the frequent necessity for speedy reference. It may also be mentioned that the Hon. George W. Ross, Minister of Education for Ontario, personally interested himself in the display here and in Canada, and while in England was made an Honorary Commissioner of the Canadian Section."

The *Christian World* says:—

"The Province of Ontario has taken advantage of the Colonial and Indian Exhibition to call attention to its educational system, of which it is justly proud. A complete collection of school appliances, pupils' work, etc., prepared under the direction of the Minister of Education, is exhibited. A catalogue of this collection, prefaced by an exhaustive descriptive and statistical account of the past progress and present position of education in the province, may be obtained by anyone interested in the work from Dr. Passmore May, the Commissioner in charge. The population of Ontario is now a little short of two millions, and in forty years the children of school age have increased from 183,539 to 471,287. The number of schools has increased from 2,610 to 5,316, with a present annual expenditure of between three and four million dollars. There are five universities or colleges not under provincial control; nineteen classical and literary colleges; eight medical colleges, including two for women; and six theological colleges, belonging to the Churches of England and Scotland, the Roman Catholics, and the Baptists. There are various other miscellaneous professional institutions. The Sunday-schools are 3,600 in number, with 200,000 scholars, taught by 23,000 teachers. The Province has incorporated what seemed to it the best features in the educational systems of the States, Germany, and our own country. It evidently holds firm to the belief that knowledge is power. The progress made is marvellous considering the difficulties that have had to be encountered and overcome."

The *South London Press* in an article on Education at the Exhibition says:—

"A brief study of the great Intercolonial Show at South Kensington will convince the inquirer of the progress education is making in our Colonies. In each of the courts there are photographs of school houses, colleges, and universities, as well as statistics of the number of children under instruction, the amount of money annually spent on schools, and other such information. Canada has, however, the best educational display in the Exhibition, and judging by its size and completeness, the great Transatlantic British dependency is intellectually more than keeping pace with the times. This is the most enlightened age of the world's history, and all civilized countries are now competing in the efficiency of their systems of education, genera and technical, as it is well uderstood by their statesmen and political economists that education is the most powerful lever for the social elevation of the masses, and the surest foundation for the stability of the State. This fact would seem to be fully recognized by the Government and people of Ontario, or, as it was formerly called, Upper Canada—the wealthiest, and most influential province in the Confederation. Her educational display at South Kensington is very fine, and while that of the Dominion is the largest in the Exhibition, that of Ontario is the best and most important of all the Canadian provinces. On the walls there are numerous photographs of the educational establishments, many of which would seem to be buildings of considerable architectural merit, such as the University of Toronto, St. Michael's College, Toronto, Trinity College, Toronto, the Catholic Convent at Niagara Falls, and many other institutions for the instruction of youth. There are also some excellent drawings by pupils of the Art Classes connected with the Mechanics' Institutes, all of which receive a grant in aid from the provincial Government, of which education is a department, under a responsible Minister, who has recently made a tour in Europe to see what improvement he could effect in the Ontario school system. The display, which was in charge of Dr. May, who is an experienced educationist, does the Province honour, and is a strong evidence of her intellectual energy, as well as of cohesion and unity of action among her people."

A special report for the *Colonial Exhibition Supplement* on the Ontario Educational Exhibit was prepared by Mr. H. Courthorpe Bowen, M.A., Principal of the Finsbury Training College for middle and higher schools, from which I here give extracts, and shall

give others under the different classes as extracts from Mr. Bowen's report. In his introductory remarks, Mr. Bowen says :—

"Through the kindness of Dr. May I have been able to make a tolerably minute examination of the educational work arranged by him, and now to be seen in the Ontario division of the Canadian Court of the Colonial and Indian Exhibition. I propose to state as concisely as possible, the general impressions which that examination has left upon my mind. Let me say at once that I have been much struck by the completeness and comprehensiveness of the exhibit as a whole, and by the generally satisfactory character of the work shown—work which is the result of an educational system of which Ontario is very justly proud. As far as completeness and soundness of organization are concerned, we have nothing in the old country to be compared with the system of Ontario. In England organization ceases with the elementary—or as a Canadian would call them, the 'public'—schools. Above this, the lowest grade, English education is entirely unorganized. This state of things, no doubt, has its advantages ; but it has one very great disadvantage, against which Ontario has most wisely protected itself. In English schools, above the lowest grade, anyone can assume the office of teacher without having satisfied any tests that he or she is fitted to teach or to manage school-classes ; while, strange to say, our inspectors of schools, with only a few though very striking exceptions, are the most amateur of all, and have not, as a rule, ever been schoolmasters. Even amongst our elementary teachers' training, properly so-called, is by no means universal, and what there is of it is in many respects decidedly unsatisfactory. In Ontario, however, as far as I can judge from the printed regulations, both the system of training adopted and the course of study prescribed, seem to me very distinctly good ; though I think that more importance should be attached to the regular study of Psychology, and that every teacher should be required, even for the third-class certificate, to master as much of the subject as is contained in such a book as Mr. Sully's smaller one * 'The Teacher's Handbook of Psychology,' while as to the results of the system, as shown in the work of the pupils of the Public and High Schools of Ontario, I can honestly say that, taken as a whole, it is already, in my opinion, quite equal, and in some respects superior, to the average work of our Elementary, Middle, and Grammar Schools in England. And, moreover, the work of the Collegiate Institutes. except perhaps in the department of classics, would not suffer much by being compared with that of our great public schools.

For details of Mr. Bowen's report see notice of the different classes of exhibits.

Extract from a lengthy article in the *Clerkenwell Chronicle* :—

"The Ontario Court is situated at the end of the Machinery in Motion Section, and between it and the New Zealand Court, and occupying about 3,000 feet of space, the exhibits being in charge of Dr. May, an experienced educationist. At South Kensington this gentleman never loses an opportunity of directing public attention to his exhibits, and to that end has published an exceedingly interesting handbook, which he judiciously distributes to those interested in school matters. In the centre of the court are charts which show at a glance the educational work of the last few years and the basis upon which the system is established, In elegant glass cases are numerous models for the use of pupils, more especially those of the Normal Schools and Art Classes, many of them being connected with the Mechanics' Institutes, of which there are in Ontario a great number scattered up and down the country, the pupils of those classes being eligible for certificates of competency from the Education Department of the Provincial Government. Toronto, the capital of Ontario, is an archiepiscopal see of the Roman Catholic Church, and the people of that communion have separate schools, or, as they are called in this country, denominational schools, and judging of them from the display at the Collinderies, many of them are large and handsome buildings, to which in the arrangement in his collection of photographs Dr. May has given advantageous positions, a rather pleasant feature, inasmuch as it shows a spirit of impartiality to Catholics and Protestants alike Without going into the minute details of this excellent exhibit of the educational progress made during the last few years in the large and flourishing Province of Ontario, we may, however, generalize by saying that it is a striking evidence of the push and energy of her people and Government. The fine collection of photographs, models, drawings, scientific instruments school furniture, maps, globes, needlework, carving in wood, metallurgical designs, and class-books, are powerful witnesses of her rapid strides towards that higher civilization always brought into existence by refinement and education."

* I subsequently directed Mr. Bowen's attention to the fact that Sully's Psychology and Jardine's Psychology of Cognition are on the list of books recommended for teachers.

I shall now refer to the different classes of exhibits as classified in the catalogue:—

PART I.

NORMAL AND MODEL SCHOOLS, PUBLIC AND HIGH SCHOOLS AND COLLEGIATE INSTITUTES.

Class 1.—Historical and Statistical.

This Class consisted of Educational Reports, Statistics, etc. The principal feature was an educational trophy, which was placed in the centre of the Court. It consisted of twelve large charts, showing the progress and statistics of Educational Institutions under control of the Education Department, and Educational Institutions assisted by the Government of this Province These were mounted on a dodecahedron or twelve-faced prism, with mirrors between the frames. On the top of each frame was a large photograph of the institution referred to in each chart. In the centre of the charts, and surmounting the prism, was a semi-circular support for a 36-inch globe, so colored and placed in position as to show the immense extent of territory in the Dominion of Canada.

This trophy was a great attraction, the excellent photographs of some of our principal educational buildings were much admired, and the statistics on the charts were so clearly indicated that persons could see at a glance the immense educational progress we have made in this Province during the past forty years.

In addition to the trophy, we had a large map of Ontario, specially prepared to show the number of public schools, high schools, colleges, ladies' colleges, universities, etc., in each county.

Class 2.—School Methods and Organization.

In this Class were books on school methods, education, hygiene, etc. The following notices refer to some of the books:

The *Schoolmaster* has the following review of the Manual of Hygiene for Schools and Colleges (Toronto, W. Briggs):—

"Prepared by the Provincial Board of Health, and authorized by the Minister of Education, for use in all schools under the control of the Education Department of Ontario, this work, while presenting nothing of originality in conception or treatment, appears to be a very fair compilation from acknowledged text-books and authorities on both sides of the Atlantic. A good table of contents precedes, and an index follows the text; while speedy reference is much facilitated by printing the first words of each paragraph, which are so contrived as to give a clue to what follows, in condensed type. The references in the index, too, are to paragraphs, not pages. There is the usual amount of elementary physiology; which, however, we would rather were omitted, and taught, as our syllabus requires, previously from special text-books. Among the statistics adduced in proof of the influence of sanitary improvements on the health of towns, the most remarkable are those showing the reduction of the mortality from typhoid in Munich, from 242 to 17 per 100,000, step by step with the introduction of better methods of sewerage. We should, however, have liked to see more attention called to the fallacies incident to the inconsiderate use of statistics. There are some interesting remarks on the feasibility of sewage irrigation, even when the ground is frozen hard and covered with snow. Mr. W. Briggs' (not the publisher's) experiments with smoke in demonstrating the movements of the air in rooms, with the inlets and outlets in different positions, are most interesting, and, should they be verified, cannot fail to be of the utmost practical importance. He found a complete change of the air in every part of the room only when the outlet was at the level of the floor and the inlet high on the same side. The chapters on school hygiene are especially good, and the work, as a whole—covering a somewhat wider field than our elementary and advanced, but a narrower than our honors syllabus—is one which we can heartily recommend. We cannot but think, however, that the introduction of a few mathematical formulæ in the chapters on ventilation and sewerage would be an improvement.

Public School History of England and Canada. By G. M. Adam and W. J. Roberts, Toronto : The Copp Clark Company.

"We felt, after reading the preface of this book, that we should find a short history, but very well compiled and written, and we were not disappointed. The hints to teachers, though somewhat out of place, are excellent in their way, and there is a careful list of authors recommended. We are surprised, however, that this list omits Mrs. Rawson Gardener's name."

The Rev. C. H. Spurgeon, in the *Sword and Trowel*, refers to the "Scripture Readings for High and Public Schools" as follows :—

"Our Ontario friends have selected these readings from Scripture, for use in the schools of the Province, and the selection has been judiciously made. Without violation of religious liberty, the Bible is thus read in the public schools ; and why not ? What is education without religion and morality ? Where can these be so well learned as from the sacred Word ?"

The *Christian World*, in a special notice, says :—

"We have received a copy of 'Scripture Readings for High and Public Schools,' published by the Education Department, Ontario. The readings have been carefully selected and arranged by the representatives of all denominations. The volume appears very suitable for the purpose in view. The readings are classified as historical, devotional, didactic, prophetic, and moral ; the Gospels ; the Acts of the Apostles ; and Selections from the Epistles. The whole of the Bible is thus laid under contribution, and the young folk, for whose benefit the book is designed, should obtain from it an intelligible idea of the main facts of sacred history and teaching, without the glosses put upon it by sectarian explanations. In the preface, teachers are exhorted to due reverence, decorum, and earnestness, while the Scripture exercises are in progress, and are enjoined to lose no opportunity of inculcating the principles of truth and honesty, and obedience to those to whom it is due."

The *Christian Herald and Signs of the Times* also remarks :—

"A volume of 'Scripture Readings for High and Public Schools' has been prepared under the direction of the Education Department of Canada, which contains a course of lessons so arranged as to include the most instructive portion of both the Old and New Testaments. Dr. May, of the Canadian Education Department, Colonial and Indian Exhibition, South Kensington, London, will answer any inquiries which may be addressed to him upon the subject."

Class 3.—School Architecture and Photographs of School Buildings.

These large photographs were mounted in handsome black walnut frames, and displayed in front of the galleries.

The following extract is from the *Clerkenwell Chronicle* :—

"There are in the Exhibition numerous examples of the educational development of the colonies, but the largest and most important is that of Ontario, or, as it was formerly called, Upper Canada. This fine display of School appliances and pupils' work marks the extraordinary march of education in the Province alluded to, which all authorities agree as being a portion of the Dominion that has, during the last twenty years, made rapid strides in the paths of industrial and commercial progress. On the walls of the Ontario Educational Court are large photographs of the different scholastic institutions. Elementary Schools, Normal Schools, Model Schools, Art Schools, Mechanics' Institutes, Colleges, Convents, Seminaries, the University of Ontario, and other establishments for the education and improvement of the young man and womanhood of Ontario. Photography is one of the triumphs of modern science and ingenuity. It may be fairly considered a branch of modern education, inasmuch as it portrays and easily makes clear to the understanding scenes and places which could not be so well done by any amount of descriptive writing ; and placing in the Exhibition pictures of their educational establishments, the Ontario Government has acted wisely and well.

Everywhere in Canada the school-houses are, generally speaking, the largest and most conspicuous buildings in the villages and small towns, and this applies specially in the rich and fertile Province of Ontario, that directly and indirectly taxes itself rather heavily for the purposes of education, which is a department of the Provincial Government under the control of a respon-

sible Minister. The people recognize the necessity and value of education in the promotion of industries and manufactures, as well as in the development of their country's many natural resources. On reflection, however, there is nothing very wonderful in the colonies endeavoring to make education as general and as practical as possible, because, as a rule, it is only men of natural enterprise and energy who emigrate, and it is, therefore, entirely in accordance with the law of progress that they shall, in the new countries of their choice, establish the most liberal and useful system of education they can devise. A man may be illiterate, but endowed by nature with large-heartedness and force of character, and such a man, by his vote and his money, will determine that his country and his children shall, intellectually, be superior to himself. This is in reality the secret of the great desire in the colonies to keep pace with the times in educational matters."

Class 4.—School Furniture and Fittings.

School desks and seats were exhibited in the Educational Court by the Bennet Furnishing Company, London, and W. Stahlschmidt & Co., Preston. They were distributed throughout the Court in such a manner that, without obstructing the passages, the seats might be used by persons examining the exhibits. As over 5,000,000 persons visited the Exhibition, it is a safe computation to say that over 500,000 persons used these seats during the Exhibition, and it is gratifying to state, that at the close they were apparently in as good condition as when first screwed to the floor.

The Bennet Furnishing Company have established manufactories in England and Scotland, and have fitted up several large schools with Canadian desks and seats. Messrs. Stahlschmidt & Co. have opened up an agency in London.

The *Globe*, referring to the excellence of the school desks in the Ontario Educational Court, says:—

"Unfortunately, in this country, sufficient attention has not been directed by schoolmasters to the importance of providing desks and seats adapted to the requirements of children. We are told by persons in authority, that the death-rate of children is diminishing, in consequence of improvement in sanitary surroundings. We do not hesitate to say that the death-rate would diminish in a much greater proportion if proper school-desks and seats were provided for them."

Class 5.—Kindergarten Material.

Specimens of Kindergarten Furniture were exhibited by Selby & Co., Toronto. The smaller chairs, painted to represent the primary colors, were a novelty, and there were numerous applications for their purchase.

Class 6.—Physical Education.

A large gymnasium was exhibited by the Department, but for want of sufficient room in the Educational Court, it had to be set up in the quadrant leading to the Albert Hall.

Class 7.—Text Books.

A large book-case, placed near the entrance to my office, contained samples of all the text books authorized for use in Public Schools, High Schools, and Collegiate Institutes.

The following notice of the New Canadian Readers, authorized by the Minister of Education, is from the *Schoolmaster*:—

"*The Ontario Readers.* First Reader (parts 1 and 2), and Second, Third and Fourth Readers. Toronto: Copp, Clark & Co.

These Ontario Readers are authorized by the Canadian Minister of Education for use in the public schools, and are fine specimens of what a set of reading books should combine. They

begin with the elements in Part 1 of the First Reader, and gradually go on through the simplest primary exercises, until, in No. 4, we have selections from authors who stand in the front rank of English literature. High-class pictorial illustrations are a considerable feature in both parts of the First Reader, and materially assist teacher and scholar in surmounting the difficulties in the early stages. The Second Reader is adapted for a good second standard, the Third Reader for the next two standards, and the Fourth Book would suit the upper-classes in any school. It is a veritable storehouse of gems of modern English, and is as interesting to the adult and junior students in the mother country as we hope it proves to the adult and scholar in the great Canadian Dominion over the wide Atlantic. The prefaces and explanatory pages to each book are excellent accompaniments to the set. Such books are an honor to any country. If children are to be taught reading in a logical manner, and to have their intelligence developed on rational lines, and withal to receive encouragement in their daily tasks, books like the Ontario Readers must be successful in producing such results, or they can never be done at all."

Canadian Drawing Books. The following letters are from the most prominent and experienced teachers of drawing in the United Kingdom :—

Copy of letter from Miss Gann, Superintendent of the Female School of Art, under the patronage of the Queen, 43 Queen Square, Bloomsbury.

November 8th, 1886.

Dear Sir,—The five little books, "The Canadian Drawing Course," which you have been good enough to send me, as being specially designed for pupils in schools when trained teachers in drawing are yet unattainable, I think excellent for the purpose.

I might suggest, if you publish a further course, that it would be interesting, and would make a variety always desirable in teaching the young, if you could make use of other leaves and treat them as you have done the horse chestnut in Book 2.

Miss Wilson and myself were much pleased with our visit to the Educational Department of Canada in the Colonial and Industrial Exhibition, which you made so interesting by your explanations.

We considered the Elementary work exceedingly good and the designs especially so. I wish we could have specified some of the works which pleased us most, but unfortunately we did not take any notes at the time.

I have, etc.,

LOUISA GANN.

Copy of letter from Mr. J. Sparks, Superintendent, National Art Training School, South Kensington.

November 3rd, 1886.

Dear Dr. May,—I have to thank you for the valuable and interesting books you were good enough to send over to me.

The drawing books are good and carefully edited, but I am still of opinion that the Belgian system, which deals with drawing from the first, when children are five years old, has much to recommend it over drawing on paper, especially as, in this country at least, "cramming" for the Government paper is about all that is thought of in the freehand classes.

I am quite sure blackboard teaching to classes is the best means of developing children's thinking powers.

I remain, etc.,

J. SPARKS.

Mr. Sparks' opinion perfectly coincides with that of this Department. We are endeavoring to make blackboard teaching in drawing most prominent in all our educational institutions, and it is generally adopted in the Art schools, but, as subsequently explained to Mr. Sparks, drawing is comparatively a new subject in our public schools, and as the majority of our teachers have had no experience in this direction, the new series of drawing books are specially prepared to assist the teachers as well as pupils.

Extract from Mr. Bowen's report :

"*Drawing.*—By the kindness of Dr. May, I have been able to examine carefully the fine drawing-books of the 'Canadian Drawing Course,' and from the point of view of one fond of Art and a teacher keenly interested in Art teaching, I must pronounce them to be very good indeed. There are, however, one or two points with regard to them which I should like to put forward

for reconsideration. If the size of the books is intended to indicate the size of the pupil's drawings, then I cannot but think them far—at least four times—too small. *The hand cannot be free* when the work measures no more than two or three inches in its greatest length ; while not only the hand, but the wrist often, and even the elbow sometimes, should be given free movement. The elaborate pictures of men and animals in some of the books sent in by these same schools were, I am sorry to say, in my opinion wholly unsatisfactory, and likely to do harm rather than good. On the other hand, there were some drawings of flowers (from nature) from the Ontario Art Schools, which were very good. So, too, the Model drawings from most of the High Schools and Collegiate Institutes were very satisfactory in regard to correctness and neatness, while these same Schools and the Mechanics' Institutes exhibited satisfactory, and in some cases excellent, specimens of geometrical drawing."

Mr. Bowen's objection as to the size of drawings is removed by the previous statement that these drawings are copied on the background by the pupils.

We perfectly agree with Mr. Bowen in regard to the pictures of men and animals. They are of no practical value, but as they were sent from schools which had scarcely commenced work in accordance with the new system of industrial drawing now made compulsory, it was considered advisable to exhibit them so as to compare the value of former school work with that of the present time.

Class 8.—Reading Charts, Etc.

The illustrated Reading Lessons exhibited by Messrs. Copp, Clark & Co., to accompany the First Readers, attracted much attention ; the clearness of type and excellence of drawing was much commented upon, and numerous applications were made for the purchase of the Tablet Reading Lessons displayed.

In this class, too, was a set of Tabulated Phonetic Alphabet Charts by Mr. Caleb P. Simpson, Leamington. These were of great interest to teachers, and especially those who had made a study of Phonotypy.

Class 9.—Drawing Models.

In this class were some excellent Drawing Models of common objects, also sets of Primary Canadian and Geometrical Models adapted to the Canadian Drawing Books, exhibited by Messrs. Selby & Co., Toronto.

Class 10.—Music.

Messrs. R. S Williams & Son exhibited a Public School Cabinet Organ, and Public and High School Piano in this class. As their instruments were frequently played upon by an expert during the exhibition, visitors had an opportunity of judging of the quality of tone, power, etc. Although the Public School organ is so light that it can be carried by a child from room to room, it is sufficiently powerful for large school rooms or outdoor exercises.

The Canadian School Publishing Co., Toronto, also exhibited Music Charts and Books in this class, and I am informed that they have already received orders from England for the Normal Music Charts.

Class 11.—Geography and Astronomy.

In this class we had a large display of topographical illustrations consisting of Terrestrial, Raised, and Physical Globes, and a collection of School Maps and a Map Case with patent springs exhibited by the Map and School Supply Co., Toronto ; also Astronomical Illustrations, embracing Celestial Globes, Drawings, Astronomical and Physical Maps and Charts, etc., and a Newtonian or Astronomical Globe recently invented by Mr. Turnbull, Toronto, and published by Messrs. Selby & Co., Toronto.

Class 12.—Chemistry.

This class contained some excellent Chronological Charts, including Merritt's Historical Tree of British North America.

Class 13.—Ethnography.

This class was represented by busts of celebrated Canadian Statesmen, Divines, Educationists, etc., together with a collection of colored portraits of Indians.

Class 14.—Anatomy and Physiology.

A large glass case at the end of the Court contained Anatomical Models, which included a Manikin or Model of the human body, showing its internal structure.

This case was a great attraction, and was daily surrounded by crowds of persons.

Class 15.—Zoology.

In addition to the ordinary Zoological Charts for school purposes, we exhibited a full set of Audubon's Animals of North America, chiefly of the natural size, colored from nature, with common and technical names attached. The Ontario Agricultural College, Guelph, also exhibited collections of insects injurious and beneficial to vegetation.

Class 16.—Botany.

The Models of flowers exhibited in this class were of great interest to teachers, and were acknowledged to be of great value for illustrating Physiological Botany. In addition we exhibited Botanical Charts, Flowers, Plants, and Object Lessons. The Ontario Agricultural College also exhibited specimens illustrating Systematic and Economic Botany used for teaching purposes.

Class 17.—Geology and Mineralogy.

This class was well represented by collections from the Ontario Agricultural College, including specimens illustrating the Geology of the Province of Ontario, used for teaching purposes, including the different geological groups, rocks which chiefly compose the earth's crust, minerals which constitute the majority of rocks, animals which have influenced the formation of soil, etc., also a large mineralogical collection labelled to show species, crystallographic forms, chemical formula, and locality.

Class 18.—Philosophical Charts.

This class was represented by the ordinary School Charts for teaching Natural Philosophy.

Class 19.—Physical and Chemical Apparatus.

The apparatus exhibited filled several large glass cases, and is adapted for experiments in Matter, Force and Motion, Gravitation and Molecular Attraction; Hydrostatics,, Properties of Gases, Acoustics, Heat, Light, Magnetism, Frictional Electricity, Dynamical Electricity, and Chemistry.

The following is an extract from Mr. Bowen's report :—

"The collection of apparatus was very large and very varied, and contained far more than I had time to examine or have space to write about. The general result was very satisfactory. The appliances for teaching Physical Science were very complete and good of their kind. The maps and the globes were good, especially the latter; and I noticed a particularly clever time-globe, invented, I was told, by Mr. Turnbull, of Toronto. The glass models of solids and their sections, and of crystals, were well worth notice; and in its way nothing could be better than the anatomical manikin, which could be taken to pieces and examined and then built up again. With it there were some well-executed models of parts of the human body for the teaching of

physiology. But perhaps the most striking of all was the collection of geological specimens sent by the Ontario Agricultural College, and the Experimental Farm (Guelph), illustrating the rock formation of Ontario. Nothing could have been better, or better arranged. The dissected map of the southern part of Ontario, used by the Institution for the Blind at Brantford, struck me as clever and worthy the attention of all teachers of the blind. The Bennett Furnishing Company (London), exhibit an excellent oak school-desk for two, solid, steady, and marvellously cheap; while the public school organ of Messrs. R. S. Williams and Son (Toronto), is admirably suited for its purpose."

Extract from the *Pharmaceutical Journal*:—

"The Legislature of Ontario is very liberal in its votes for the support of scientific and educational institutions. Evidence of this may be seen in the Educational Court of Ontario before referred to, which is well worthy of a visit to all interested in education and science. Apart from the large and varied collection of pupils' work from Public and Grammar Schools, Art Schools, Mechanics' Institutes, etc., there is an excellent display of physical and chemical apparatus, botanical and geological charts, botanical models, specimens of plants illustrating systematic and economic botany, insects injurious and beneficial to vegetation, geological and mineralogical collections, including rocks which chiefly compose the earth's crust, minerals which constitute the majority of rocks, animals which influence the formation of soils, etc., such as are used in Canadian schools and colleges. Altogether the exhibit is probably the best and largest display of general educational work and appliances ever exhibited by any one British colony."

In this class was a collection of School Apparatus manufactured by the Map and School Supply Co., Toronto. The *Globe* remarks on their exhibit:—

"The Map and School Supply Co., Toronto, has a large and varied assortment of educational appliances of their own manufacture in the Canadian Court. They are the largest manufacturers of school apparatus in the Province of Ontario. Mr. Chas. Potter, the senior member of the firm, supplied the globes and school appliances to the Education Department for over twenty years, during which time schools were supplied from the Educational Depository. Some of the apparatus, globes, anatomical models, etc., exhibited by the Education Department are of his manufacture, and there is no doubt that, from his long experience, he is a thoroughly practical man, well skilled in the construction and uses of all kinds of instruments for illustrating the principles of physics, chemistry, etc. This company's exhibit is classified in the official catalogue under the following heads: 1. School Furniture and Fittings, including numeral frames, with or without blackboards, sheepskin and fluted erasers, etc.; 2. Topographical illustration, including maps of the continents, a new and improved school map of the Dominion, showing the new territories, railroads, etc., and an ingeniously constructed map case, which protects the maps when not in use, and is so constructed that the maps are not liable to the wear and tear found in ordinary map cases. 3. School Apparatus. In this department they have a large display of instruments for experiments in pneumatics, hydrostatics, hydraulics, electricity, heat, etc. The exhibit is a useful one, and the school teachers of Ontario may justly feel proud that they have apparatus manufactured in their own Province which will bear comparison in excellence of manufacture with those from older countries."

Class 20.—Pupils' Work—Kindergarten.

Exhibits in this class were sent from the Provincial Model School and the Public School, Toronto.

Mr. Bowen says:—

"*Kindergarten Work.*—I learnt with the greatest satisfaction that the Kindergarten, in connection with the Public School system, has been introduced into Toronto, Hamilton, and Berlin; that at Toronto *all* primary teachers receive Kindergarten training; and that each of the Provincial Normal and Model Schools at Toronto and Ottawa has a Kindergarten teacher on its staff. This is exactly as it should be, except, perhaps, that *all* teachers whatsoever would be immensely benefited by, and should be required to possess an acquaintance with Frœbel's principles and methods. The above arrangements have only been in full force for some two or three years, so that the results shown are necessarily somewhat immature, especially in the examples of color. I noticed some maps on glass which seemed to me to have aims other than Frœbelian—to indicate an endeavor to impart to children information which they are not ready to make use of for themselves; while some of the wool-knitting was, I imagine, a little too

elaborate for children of the Kindergarten age (4 to 8). I dare not venture to criticise further, for it is essentially the spirit, manner, and method in which the children are led to work, and not the work itself, which renders their employment a Frœbelian *training* instead of a mere mechanical occupation ; and it is just these three that no exhibition of work done can show. I can say, however, that the little people already evince considerable neatness and skill in their folding, and cutting, and pattern making."

Class 21.—Pupils' Work—Public and Separate Schools.

This class was represented by a large number of schools in cities, towns, villages, and rural districts, and included nearly 10,000 separate exhibits of Copy Books, Drawing Books, Maps, Arithmetic, etc.

In addition, specimens of pupils' work were sent from the Normal and Model Schools at Toronto and Ottawa, and the High Schools and Collegiate Institutes.

The *Canadian Gazette*, referring to the galleries, says :—

"Especially interesting in this gallery are the specimens of work from the 5,300 public and separate schools of the Province. Here is represented work done by children from seven to fourteen years of age. The drawing and map work is excellent, especially in the Toronto public schools, and in the separate schools of Ottawa."

Extracts from the *Schoolmaster* :—

"There are in the Canadian Education Court no less than 1,273 exhibits in connection with the work of the public schools. These have been arranged and classified by Dr. May, under whose guidance we made a careful survey of selected specimens, which have been sent over as fair samples of the daily outcome of the Normal and Model Schools. the Public and High Schools, and the Collegiate Institutes. The Kindergarten work is excellent of its kind, and shows the results of the training in the Provincial Model School, Toronto, and of the Public Schools of the same city. From 5,316 schools there has been sent a varied and excellent collection which represents the ordinary work done by children from seven to fourteen years of age.

The drawings exhibited have been taken from the work in progress in the schools in the middle of the term, and, although showing considerable skill, are scarcely a fair example of the improvement which can be made in a full session. We can speak favourably of the specimens which were placed before us by Dr. May. In all the departments of school work which we have specified there are excellent examples of what can be accomplished in the free institutions of a country which has not yet resorted to the degradation of its schools by the infliction of percentages, or the illusory payment by the pass."

Further extracts from Mr. Bowen's report :—

He says : "I will now go more into details, and I trust that it will not be considered presumptuous if here and there I offer a few suggestions. I do not pretend to have made by any means an *exhaustive* examination of the material exhibited, so that no inference whatever must be drawn from my silence on any point, or any omission to mention any school or other institution.

Writing.—On the whole the writing was highly creditable in all grades of schools, especially in the case of the girls. I was particularly attracted by the clean finish of the work sent in by the fifth class of the Ottawa Model School and the Waterford Public School—in both cases girls ; while the Hamilton Collegiate Institute showed that good writing is not incompatible with a higher education. Indeed, it was surprising, and a matter of decided congratulation, how very little distinctly bad work was to be found at all amongst so many hundreds of specimens. The one fault to be found—and it was quite a general one—was a slight tendency to too much 'flourishing,' even in the best specimens. It was evident that the very satisfactory results exhibited had been obtained by constant care and watchfulness, for there seemed to be nothing new or particularly striking in the system of exercises employed. I cannot but think, however, that even better results would be got—or at any rate time would be saved—if elementary freehand drawing were made more distinctly *introductory* to, rather than only *supplementary* to, writing. I do not mean by this that drawing should make writing one of its chief aims, but that it should come before and prepare the way for writing.

Composition.—Many very creditable essays were exhibited—short stories, descriptions, accounts of the subjects treated in object lessons, etc. I was somewhat surprised however, to find that grammar is held to be the introduction to composition. The right introductiou is literature—at least so it seems to me—beginning with the simplest poems and stories, and rising

gradually to the more difficult—from *John Gilpin* to Burke and Shelley and Shakespeare. I doubt whether any of our best writers could pass, or could ever have passed a respectable examination in formal grammar. We learn to write well by acquaintance with good writing. However, as I have said, many of the essays shown were very creditable ; though, if I remember aright, this was generally in the case of elder pupils who would have already studied some literature.

Arithmetic.—Of this subject there is not much to be said. Except in the case of Toronto, the work sent in by the Public Schools, though satisfactory in most cases as to method, was hurried and untidy. Amongst the specimens of arithmetic and book-keeping sent in by the Ryerson, Wellesley, Dufferin, and Jesse Ketchum Schools, I noticed that a very large majority were decidedly good—well reasoned, and the reasoning well set forth, and the book-keeping neatly written.

Geography.—I looked over several papers of questions and answers on this subject ; but found all of a very ordinary type. As to Map-drawing, the smaller maps were, in general, neat and tolerably accurate ; but I did not notice that they were drawn on any particular plan. I should like to recommend a modification of Mr. Swinstead's 'central-line' plan as a good one. The larger colored maps deserve praise, especially some of those from the country schools. Several, however, were too crowded with names. It struck me that a good deal of time must have been spent over these maps, perhaps more than map-drawing really deserves.

History.—The history answers in the papers I looked at were intelligent, and on the whole satisfactory. May I hint that pictures again would considerably help the boys and girls to realize what they read about—pictures of individuals, places, buildings, scenes, etc. Dr. May told me that it is recommended for the use of High Schools that small busts of celebrities be used with the ancient history. This seems to me an excellent idea.

English Grammar.—The papers on this subject seemed generally satisfactory—the analysis and parsing were in most cases well done. I do not, however, consider it altogether a good plan to allow the use of 'forms' in analysis. I see that the 'general directions' lay down that the elementary parts of grammar should be learnt inductively, which is excellent. But the traces of induction were not very clear in the papers."

Mr. Bowen's concluding remarks :—

"I feel that I have not noticed half as much as I might have done, had I had more time at my disposal ; and I dare say some of the teachers of Canada—my *fellow* teachers, may I not call them ?—will not agree with all of my remarks. But of this let them be sure, that I have been very strongly impressed with the educational activity and efficiency of Ontario ; that I have derived not only considerable pleasure, but also considerable profit from their admirable exhibit, which does such high credit to everyone concerned ; and that I am more than ever convinced that the Old Country has already very much to learn in educational matters from her great daughter beyond the sea. May that daughter go on and prosper continually—and she *will* prosper, no one can doubt, as long as—in the words written proudly over her Court in South Kensington—she makes the goodness of the education she so liberally gives one of her chief claims to glory."

See also the notice on pupils' work given in the description of Educational Court, by the editor of the *Globe Colonial Exhibition Supplement.*

PART II.

MECHANICS' INSTITUTES.

About fifty Mechanics' Institutes sent specimens of Drawing, including Freehand Geometry, Perspective, Model, Blackboard and Primary, Machine Drawing, etc. Several beautiful models were also exhibited by members of Institutes, and some excellent specimens of wood-carving.

The following extract on Mechanics' Institutes is from the *Globe* :—

"We append some further notes on the exhibits in the Ontario Educational Court from institutions partly under the control of the Provincial Government. It should be noted, to the credit of the Province, that the Ontario Government is very liberal in encouraging mechanics and artisans to improve their spare time by reading and studying the different branches of science applicable to their respective pursuits. It is mentioned in the Exhibition catalogue, prepared by Dr. May, that the Mechanics' Institutes receive from the Government two dollars for

every dollar expended up to the sum of 400 dollars per annum. The value and extent of this pecuniary support may be guaged, from the simple fact that last year no less than 147 of these Institutes were in existence. Respecting the work accomplished at them, it is apparent that drawing, suitable for mechanics, is one of the most popular subjects of study. As many as fifty institutes send to the Exhibition specimens of examination work in freehand, geometrical, perspective, model and memory drawing. In addition we notice the following :—

Carleton Place Mechanics' Institute sent a large collection of specimens of machine drawings ; these, we understand, are chiefly done by workmen employed in the workshops of the Canadian Pacific Railway. They exhibit considerable skill, and reflect great credit on the teachers, who, we are informed, were trained at South Kensington. Probably the most interesting, ingenious and beautiful piece of work showing industry and perseverance, is a working model of an English locomotive engine, made to the scale of one inch to the foot, exhibited by Mr. Lacey R. Johnston, President of the Institute. This model has been greatly admired by persons interested in machinery, who pronounce it to be one of the most perfect and ingenious working models ever exhibited. This same Institute also contributes a beautiful ornamental inlaid table, the work of Mr. A. Parker, and a model of dwelling-house or shanty as built by the early settlers in Canada by Mr. James McVety.

Guelph Free Library exhibits some very choice specimens of carving in wood by Mr. J. O'Brien and several students.

Garden Island Mechanics' Institute is well represented. Mr. Anthony Malone, President of the Institute, exhibits a perfect model of a dram of timber as prepared for running the rapids of the River St. Lawrence. Ten or more of these drams are lashed together and called a raft. It is remarkable that the rafting and forwarding of square hewn timber for the Quebec market was commenced at Garden Island, from which this model is sent. In 1844, Mr. Dileno Dexter Calvin established a business for forwarding timber at Garden Island. This business, including ship-building, has been carried on by the same family up to the present day ; it is now a prosperous town with one of the best Mechanics' Institutes in Canada. During the past season, 1885, there was forwarded from the port of Kingston to Quebec, square oak timber, over 1,700,000 cubic feet ; elm and ash, over 1,000,000 cubic feet ; square and waney pine, over 2,700,000 cubic feet. The vast forests of Canada, which are said to be practically inexhaustible for home consumption and the probable demands of commerce for centuries to come, are a source of great wealth to that country. The exports of timber last year amounted to over $20,000,000.

Mr. Archibald Cumming exhibits a very beautiful working model of a harbor tug steam engine from the same Institute.

Galt Mechanics' Institute sends some excellent specimens of machine drawing, done by workmen employed in the Grand Trunk Railway workshops.

Port Perry Mechanics' Institute exhibits a large collection of drawings, including freehand, linear perspective, practical geometry, mechanical drawing, shading, etc.

Whitby Mechanics' Institute contributes a collection of drawings in freehand, perspective, and shading and outline from the round.

The people of Ontario are to be congratulated on the excellence of this portion of their exhibit, which has largely contributed to show visitors at the Exhibition the industry, zeal and perseverance of the working classes of the Dominion in obtaining practical knowledge, invaluable to them in their daily life, and in rendering them intelligent and self-reliant citizens."

The *Canadian Gazette*, in a lengthy article on Education in Ontario, observes :—

"That since the time of Confederation, Mechanics' Institutes have been established, an annual grant given to each Institute by the Local Government, provided it supplies a library, reading-room, and evening classes. This important branch of the public service has been n the hands o: the Provincial Education Department since 1880, and is now directed by the Minister of Education, to supply practical education of value to adult artisans. There are about 150 of these Mechanics' Institutes in operation throughout Ontario, in a population of only two millions, and of these between sixty and seventy are now branches of the Art schools. The work from several Institutes is now on display in the Court. From it may be gathered that a practical knowledge of drawing is imparted—first, by freehand ; second, by geometry and perspective ; and third, by industrial drawing. The industrial designs prepared at these Mechanics' Institutes have elicited general commendation. Mechanics, practical chemistry, and the various branches of physics, are also taught in these Institutes, thus bearing directly upon the textile and other manufactures of the country."

The *Press* says :—

"The work from the Mechanics' Institutes has attracted a great deal of attention from manufacturers and others in connection with the growing recognition of the importance of training mechanics and artisans in industrial drawing."

PART III.

ART SCHOOLS.

The students of Art Schools in Toronto, Ottawa, London, and Kingston, contributed largely to the success of the Educational Exhibit. The large collection of Drawings, Paintings, Carving on Wood, Modelling on Clay, Plaster Casts, Painting on China, etc., were much admired, and especially so the specimens of Industrial Designs, which were acknowledged by experts to be of considerable merit, and valuable exhibits from a new country, showing as they do that encouragement is given by the Government to the development of artistic work applicable to trades and manufactures.

The Marquis of Lorne was so much pleased with some of the designs for wall paper from Toronto, that he recommended me to place them in the hands of some English manufacturers. This I could not do, as they are the property of the students.

Before leaving England, having received an intimation that Her Majesty the Queen would be pleased to accept a few specimens of Art school work from Ontario, I selected some exhibits from the different departments, and forwarded them with a letter referring to our advancement in industrial Art education during the past few years, and the great interest H. R. H. the Princess Louise and the Marquis of Lorne had taken in the promotion of Art work during their residence in Canada.

In reply, I received the following letter from General Sir Henry Ponsonby, Private Secretary to the Queen:

OSBORNE, January 8th, 1886.

DEAR SIR,—The articles forwarded by you arrived here to-day, and I have given them to the Queen, who was very much pleased with them, and has commanded me to thank you for sending these well-executed specimens of the work of the Students of the Art Schools, Education Department, Toronto.

I have the honor to be, Dear Sir,

Yours faithfully,

(Signed) HENRY F. PONSONBY.

Each of the Art Schools had separate compartments for the display of their exhibits.

The British press made frequent notice of the excellence of this section of the Educational Court.

The following extract is from the *Canadian Gazette*:—

"The work from these Art Schools of Ontario is such as would do credit to many older countries. The origin of some of the exhibits is interesting. In view of the Exhibition, the Ontario Manufacturers' Association offered medals for the best designs for various manufacturing purposes, and Dr. May, as Superintendent of Art Schools, at once issued circulars to the schools, notifying them to prepare forthwith various designs. The Toronto School designs were prepared for paper-hangings; in Ottawa for iron-work, such as railings, fences, etc.; in London, designs for sideboards, etc.; and in the Kingston School for mantlepieces and overmantles. Considering, then, the fact that no selection is made in the exhibits in this class, all the competitive designs being shown, and that but a fortnight was allowed for the work, Ontario has reason to be proud of the result. It unquestionably forms a most important part of the Court. From the Toronto School of Art there also comes excellent work in electro-metallurgy taken from plaster casts and electrotypes from nature, as well as models in clay, and plaster casts from clay. Good industrial designs are also shown. The Art School of London comes out strongly in painting on china. Even the baking is done at the school, and the product is excellent, illustrating a frequent means of livelihood for young ladies in the Province. By the Kingston exhibits mechanical work is illustrated in such a way as to call forth the admiration of the principal of the South Kensington Art School. The Ottawa designs, especially the original industrial designs, are also excellent, and the complete system by which the eye of the pupil is trained to exactness of detail cannot but elicit admiration. Carving in wood is also shown from the branch Art schools, of which there are over fifty established at Mechanics' Institutes, all receiving Government assistance. The specimens from Guelph speak well for the progress made in this section.

Extract from Mr. Bowen's report:—

Art.—In passing on to the higher departments of Art proper, I feel myself to be getting on to uncertain ground, which is usually set about with warnings to tresspassers, and notices 'not to touch the flowers.' However, as I have little but praise to bestow, I hope that any accidental impiety will be forgiven me. I will try to keep on the gravel walks. First, then, I noticed some very striking needlework (flowers) from Loretto Convent, (Hamilton), and some really beautiful artificial flowers from the Loretto Abbey (Toronto).

The Ladies' College, at Brantford, have also contributed some rather ambitious work in oil and water-colors. The machine drawing and the carving in wood sent in by the Mechanics' Institutes, formed a most interesting collection, including many specimens of really excellent work; as did also their freehand drawings. But the most attractive and most memorable exhibit of all was the large and varied collection of Art work from the Art Schools of Toronto, London, Ottawa, and Kingston. The time at my disposal was all too short to allow of my doing full justice to all its many merits in detail. But the general impression made on me—especially in the case of Ottawa—was one of considerable pleasure, and—if I may be honest without offence—not a little surprise. The mere enumeration of the varieties of work from the Art Schools is sufficiently striking; life studies, oils and water-colors, freehand drawings of every kind, industrial designs, architectural and machine drawings, shading from the antique and from the flat, chasing in brass, modelling in clay and plaster casts from clay, carving in wood, painting on china, and even electro-metallurgy and repoussé work. It is somewhat difficult to know what to mention amongst so much. I may say, however, that the advanced work generally of the Ontario School of Art (Toronto) was excellent; the wall-paper patterns showed great taste in design and coloring; the drawings from the antique were very good indeed, but perhaps a little too heavily shaded; and the wood-carving, metal-work, and plaster casts were, in many cases, highly creditable. I noticed, by the way, a portrait of Dr. May in plaster, which, though undoubtedly like, was by no means flattering. The Western School of Art (London) showed some very good painting on china. The Ottawa School of Art deserves very decided praise. The paintings of flowers and plants, with industrial designs invented from them, were delightful—excellent in form and composition and color. The life-studies were very good indeed; and the water-colors were highly creditable. The drawings of a wrought-iron fence, and the collection of industrial designs, which were shown at the recent Antwerp Exhibition, deserve very decided praise. From the Kingston Art School the original designs for industrial uses were again strikingly good.

PART IV.

INSTITUTIONS FOR THE BLIND, DEAF AND DUMB.

Exhibits were sent from the Ontario Institution for the Education of the Blind, Brantford, consisting of appliances for teaching and pupils' work; similar exhibits were also sent from the Ontario Institution for the Education of the Deaf and Dumb, Belleville.

These exhibits were greatly admired; the ladies' work from the Blind Institution, as well as the ingenious appliances for teaching, came in for a full share of praise: the photographs from Belleville, showing the employments as well as amusements, were also of great interest.

Probably a larger number of persons made enquiries about these Institutions than might have been expected, because a Royal Commission was sitting which had been appointed to institute enquiries as to the systems adopted by different countries for the instruction of the Blind and Deaf and Dumb. It caused great surprise to visitors when they found that these excellent institutions are under the management of the Government, as they did not expect a colony would thus take the initiative in providing institutions under Government control for the education of our fellow citizens who are deprived of seeing or hearing.

The press made comments on this subject because similar institutions in the United Kingdom are dependent for support upon voluntary subscriptions.

The following letter refers to one of these notices:—

Royal Commission of the Blind, the Deaf and Dumb, etc.,
32 Abingdon Street,
Westminster, 6th March, 1886.

Dear Sir,—I have been favoured with an extract from the *Canadian Gazette* of October 28th, which states that you could furnish us with ample information regarding the Institution of the Deaf and Dumb and Blind in Canada. If it were in your power to do this it would be gratifying to the Commission. We are most anxious to ascertain the practices and general views of our Colonies and of foreign countries, so as to enable us to report fully on the matter to the Queen with a view towards legislation.

I remain, etc.,
C. E. D. BLACK.

I made an appointment with the Secretary, and afterwards sent all the printed reports, etc., in my possession, including a special report by the late Rev. Dr. Ryerson on the Education of the Blind and Deaf and Dumb in Europe and the United States.

Extract from *Canadian Gazette*:

"We find that Ontario has taken a decided lead of England in the provision of free education for the deaf and dumb and blind. The Ontario Institution for the Deaf and Dumb is at Belleville, and is open for a period of seven years to all deaf-mutes from seven to twenty years of age who are not deficient in intellect, and are free from contagious disease. This institution was established by the Ontario Government in 1870, at an expenditure of 200,000 dollars. The whole tuition is free, but those who are able to pay are charged 50 dollars (£10) a year for board, and non-residents in the Province 125 dollars (£25) per annum. The modes of instruction are the most modern known to the civilized world, following what is termed the 'combined' scholastic and industrial system. Every attention, too, is paid to physical training. The gymnasium, games, and calisthenic exercises form an essential part of the curriculum, and a glance at some photographs of the members of the Mute Pantomime Club and the Football Club will certainly astonish those who are unaccustomed to see in deaf-mutes such a high development of mental and physical powers. The Ontario Institution for the Blind was established at Brantford by the Ontario Government in 1873, at an expenditure of 22,000 dollars. The course of instruction is divided into three departments. In the literary department a sound English education is given. The musical department embraces instruction in pipe and reed and string instruments, and it is worthy of note as showing the high standard attained that several ex-pupils of the institution are employed as tuners by Messrs. Mason & Risch, the well-known pianoforte makers of Toronto. Then, thirdly, there is the industrial department, comprising instruction for male pupils in basket and chair making and pianoforte tuning, and for females in sewing machine, sewing, embroidery, and kindred work. The blind institution is thus supplementary to the public school system of the Province, and admits those whose sight is so impaired as to prevent their receiving instruction by the ordinary methods. Hence it is not necessary for a pupil to be entirely blind to benefit by the advantages of the institution. The models used for the manufacture of baskets, etc., are claimed to have considerable advantages over those in general use; while the remarkable crochet, bead, and other work which is contributed by female pupils, is a powerful testimony to the efficacy of the methods adopted. Natural history is also taught at schools, pupils being accustomed to the forms of animals by excellent mounted specimens. Another exhibit from the institution is worthy of note. It is a map of Ontario, dissected so that each part, representing a county, can be taken away. On the face of the map the rivers, boundaries, railways, towns, cities, etc., are depicted by means of indentations and small nails of various sizes. A child, thus guided by the shape of each county, the identations, and the small nails, is able to gain an accurate knowledge of the geography of this Province such as could not otherwise be imparted."

PART V.

COLLEGES OF AGRICULTURE, VETERINARY SCIENCE, Etc.

The Ontario Agricultural College and Experimental Farm, Guelph, was well represented. In addition to Statistical, Experimental, and other large Charts and photographs

beautifully mounted, this Institution exhibited very valuable collections of Geology and Mineralogy, Plants, Models, etc., used for teaching purposes; also Agricultural seeds, collections of insects, etc.

The whole exhibit filled over twenty small glass cases besides covering several hundreds of feet of wall space.

Application was made for the loan of a portion of these exhibits for the Agricultural Exhibition at Norwich. I sent some charts, etc., and subsequently received a letter from Mr. Dyke, Emigration Agent for the Dominion, stating that some of the leading continental agriculturists were desirous of getting copies of these charts for their colleges.

I may state that the Ontario Agricultural College ranks very high in the estimation of the old country. I was frequently told by men of experience, acquainted with the methods employed for teaching Agriculture in different countries that there was no Agricultural College in the world superior to the Ontario Agricultural College for imparting instruction to young men for practical farming.

I had so many enquiries as to the terms, etc., that I thought it desirable before leaving England to publish a short description of this Institution, and accordingly prepared a long letter, which, through the courtesy of the editors, was printed in the *Field*; the text of this letter was copied in other papers. The following is from the *Globe*:—

"THE ONTARIO AGRICULTURAL COLLEGE.

"In consequence of numerous enquiries as to the facilities for obtaining in Canada thorough education in practical farming, Dr. May contributes to the *Field* a brief account of the Agricultural College maintained by the Government of Ontario at Guelph. He writes:—

'The Ontario Agricultural College and Experimental Farm is situated near the city of Guelph, in the centre of an extensive agricultural and stock-raising district. This institution, established by the Government under the administrative control of the Commissioner of Agriculture, has for its object—1, to give a mastery of the practice and theory of husbandry to young men engaged in agricultural or horticultural pursuits, or intending to engage in such; and 2, to conduct experiments tending to the solution of questions of material interest to the agriculturalists of the province, and to publish the results from time to time. The college buildings are very spacious and commodious, and the farm consists of 550 acres, about 400 of which are cleared. It is conducted by an able staff of professors and instructors, and fitted with modern appliances for giving a thorough and practical knowledge of every branch of agriculture.

'Professor Sheldon, of the Wilts and Hants Agricultural College, England, in a recent report says: 'It is a flourishing, though quite a young institution; and its influence is being felt in the agriculture of the province. The students receive an agricultural education in which science is happily blended with practice, and theory is borne out by demonstration.'

'The instruction given at the institution is embraced under two heads—a course of study and a course of apprenticeship. The course of study is divided into five departments: 1. Agriculture, including reclamation of lands; preparation, cultivation, and succession of crops; improvement of soils and lands; breeding, rearing, and feeding of animals; implements of the farm; general economy and business of the farm; arboriculture, etc. 2. Natural science. 3. Veterinary science. 4. English and political economy. 5. Mathematics and book-keeping.

'The course of apprenticeship is divided into five departments: 1. The farm department, including dairying. 2. The live-stock department. 3. The horticultural department. 4. The mechanical department. 5. The experimental department. In these departments the students are required to work every alternate afternoon, and for one hour every morning. For this labor they are paid at a rate per hour fixed by the farm superintendent, and the payments are credited to the board accounts.

'Young men whose parents are non-residents in Ontario, are permitted to enjoy the advantages of this institution on the payment of the following fees: 1. Those who have served an apprenticeship of one year on a Canadian farm, £10 per annum. 2. Those who have not served an apprenticeship on a Canadian farm, £20 the first year, and £10 the second year; board, lodging, and light, 10s. per week. About thirty per cent. of the students are from other countries, including the United Kingdom, the United States, etc.

'In a brief sketch it is, of course, impossible for me to point out all the advantages young men, intending to become practical farmers, can obtain by attending the Ontario Agricultural College, but I will enumerate a few of them. Students have an opportunity of becoming fairly skilled in the general work of the farm. A portion of the farm is laid out in small plots, and a series of experiments with cereals, roots, grapes, manures, and various modes of management is regularly and systematically carried on from year to year. In the live-stock department there

are nine breeds of cattle, nine of sheep, and three of pigs, kept for the purpose of instruction, and experiments are made to test by feeding, the comparative value of different kinds of feed. As an illustration of the practical character of this kind of work done at the farm, I may refer to the large charts exhibited by this institution in the Ontario Educational Court at the Colonial Exhibition, showing food in cattle life, ten years at the farm ; milk per season, 12 cows ; chemical analysis of milk, 11 cows ; cream per cent., 11 cows ; butter globules, result of twenty-one microscopic observations at farm, 12 cows ; butter per 100 lb., milk and cream, 11 cows ; cheese per 100 lb., milk and cream, 11 cows. I may remark, *en passant*, that some of the leading Continental agriculturists have applied for copies of these charts for use in their colleges. The student can also obtain a practical knowledge of gardening, as there are three greenhouses, a large kitchen garden, a vinery, a 30-acre lawn, an arboretum, and a large variety of fruit and ornamental trees. He is also trained in the use of carpenters' tools—a most invaluable acquisition in pioneer life. He obtains a knowledge of the structure and functions of farm animals, and the most approved methods of treating and preventing diseases to which such animals are liable ; and, finally, I may say that, by the systematic teaching employed, his mind is expanded, his reasoning powers increased, and he becomes an ardent admirer of nature, and a nobler specimen of true manhood.

'Now, a few brief words showing why Ontario is considered such a bonanza by parents desirous of educating their children in that grand science which makes the true nobleman of nature. The Province of Ontario embraces an area of about 200,000 square miles, nearly 80,000 more than the United Kingdom. It is enormously rich in minerals ; its forests are so vast that they are capable of supplying all the timber required for home consumption and every probable demand of commerce for centuries to come ; its rivers and lakes are abundantly supplied with fish, and its forests with game. It is famous for oil-springs and prolific salt-wells ; but the great element of national wealth is its soil and the products thereof. The Hon. David A. Wells, an eminent American statesman, in an article in the *North American Review*, says : 'The Province of Ontario is as fair a country as exists on the North American continent. It is the natural habitat on this continent of the combing-wool sheep. It is the land where grows the finest barley. It raises and grazes the finest of cattle, and its climatic conditions, created by an almost encirclement of the great lakes, specially fit it to grow men. Such a country is one of the greatest gifts of Providence to the human race, better than bonanzas of silver, and rivers whose sands contain gold.' I may also remark that the climate of Ontario is one of the most pleasant and healthful in the world ; the old description of Canadian seasons—six months of summer and six months of winter—has no application whatever. The winter in the southern part of Ontario usually begins about Christmas, and lasts until the latter part of March ; further north it begins about the middle of December, and breaks up during the first or second week in April.

'The exports of agricultural products from Ontario are annually increasing. As the agricultural statistics show the total exports of the Dominion, it is impossible to give the exact proportion exported by the Province of Ontario ; but it is usually computed that Ontario furnishes five-sixths of the whole. The value of exportations were as follows in 1885 : Horses, $1,640,506 ; cattle, $7,508,043 ; sheep, $1,264,811 ; cheese, $8,902,115 ; butter, $1,430,905. During the past half century the number of the population (now over 2,000,000) has been multiplied by seven, and the area of land in occupation (now 23,300,000 acres) by thirteen, and this extraordinary development has taken place by steady and continual progress, without any phenomenal expansion followed by collapse.

'In conclusion I may remark that there are 129 free grant districts in Ontario, each containing 50,000 to 60,000 acres, and other districts will be opened up as railroads and colonization roads are constructed. By an Act passed during the present year, the head of a family can obtain a free grant of 160 acres of land, and single men, over eighteen years of age, 120 acres. The amount of money required to make a successful settlement upon a free grant is from £60 to £100. Improved or cleared farms can easily be obtained by those desirous of residing near old settled districts. The average price for good farms, including buildings, in the old settlements, is from £10 to £15 per acre ; but in new settlements, partially cleared, farms can be purchased for from £1 5s. to £3 per acre.

(Signed) S. PASSMORE MAY, M.D.

This letter gave rise to considerable correspondence, in addition to enquiries from persons with from £1,000 to £5,000 capital anxious to benefit themselves. Further information was asked for in regard to the College, by parents intending to send their sons to Canada, and in more than one instance propositions were made that the parents themselves should purchase farms and reside in this country so soon as their sons could undertake farm management.

The Ontario Veterinary College also had an exhibit in this class.

The following extract from the *Globe* sufficiently explains the excellence of this exhibit:—

"Ontario Veterinary College, Toronto.—Probably one of the most attractive exhibits in the Educational Court are the large photographs from the Ontario Veterinary College, consisting of views of the College, dissecting rooms, operating rooms, portraits of students, professors, and principal, etc. The Ontario Agricultural and Arts Association was, by Act of Parliament, empowered to establish a Veterinary College, for the instruction of pupils in the science and practice of the Veterinary Art, and as to the breeding of domesticated animals. So far back as 1862 a series of lectures on agriculture was given at Toronto University College, and Professor Smith, the present Principal and Proprietor of the Ontario Veterinary College, gave lectures in connection therewith. In 1869 part of the premises now occupied was built, and the institution has gradually grown until it has reached the proud position of being one of the largest and most popular veterinary colleges in the world. Over 600 students have graduated from this College, and there are more than 300 students in attendance during the present session. There is a full staff of professors, who lecture on anatomy, physiology, materia medica, chemistry, the diseases of domesticated animals, pathology, etc. There are large and well-ventilated dissecting rooms, an excellent museum and a Veterinary Medical Society, which meets twice a week for the discussion of subjects in connection with the advancement of Veterinary Science. The opportunities for actual practice are very great; the total number of cases, independent of cattle, treated in the infirmary in connection with this College during the month of April, 1886, was 1,074, and 84 horses were examined for soundness. Special attention is given to diseased cattle, for which there are great advantages in Toronto, as 2,600 head of cattle are fed in one establishment alone in that city from October to June.

"It is very gratifying to find that, through the energy, perseverance, and untiring industry of the Principal, this College draws students in large numbers from all parts of the neighboring Republic. The exhibit at South Kensington is greatly admired, particularly by the ladies, who gather in crowds to look at the photographs of the students, representing as they do different countries and different climes, gathered together in a Canadian College to obtain a knowledge of one of the most noble professions—that of alleviating the pain and sufferings of the brute creation. We may remark that Her Majesty the Queen took a great interest in this exhibit when visiting the Educational Court, soon after the opening of the Exhibition."

The *Canada Gazette* refers to this College as being the largest of its kind in the world.

PART VI.

SCHOOL OF PRACTICAL SCIENCE, SCIENTIFIC SOCIETIES, AND COMMERCIAL COLLEGES.

The School of Practical Science, Toronto, exhibited specimens of Drawings from the Department of Engineering, including Orthographic Projection, Perspective Projection, Surveys, Graphics, Machine Drawings, Construction Copies, Construction Designs, Stone Cuttings, Surveys, etc., etc.

The Institut Canadien Français exhibited Crayon Drawings, Indian Ink and Pencil Sketches, Mechanical Drawings, Architectural Drawings, Perspective, Map Drawings, Penmanship, etc.

The Business Colleges were represented from Brockville, Hamilton, and Owen Sound.

The *Colonial Exhibition Supplement* remarks:—

"There are exhibits from the Brockville Business College, Brockville; Canada Business College, Hamilton; and Northern Business College, Owen Sound. These Colleges send a remarkably fine collection of Penmanship, including Commercial Forms, Business Letters, Cards, Off-hand Flourishing, Pen-and-ink Sketches, and various kinds of ornamental penmanship, which show a great amount of artistic training, worthy of high commendation.

"In addition, Mr. W. C. Austin, Principal of the Brockville Business College, exhibits sets of books (in the theory and actual business department) just finished by one of the students, representing the work actually done by the students; also balance-sheets, samples of money and

merchandise used by students in the actual business department of the College ; text-books, etc., showing the thoroughly practical training young men can obtain in this College before their entrance into commercial life. We have already congratulated Ontario on the excellence of her public school system, which is generally acknowledged to be equal, if not superior, to any in the world ; we can also sincerely congratulate the Province on the excellence of her business colleges, where young men receive an education which is specially adapted to assist them in overcoming the difficulties usually found at the beginning of a commercial career. These exhibits are displayed on the principal entrance archway, and are a source of great attraction."

PART VII.

UNIVERSITIES, COLLEGES, SCHOOLS OF MEDICINE, Etc.

The Universities were represented by photographs only, with the exception of Victoria University, Cobourg, which sent publications of societies in connection therewith. Upper Canada College sent specimens of Writing and Drawing.

The Ladies' Colleges had a large exhibit. Alma College, St. Thomas, sent a valuable collection of Freehand Drawings, Perspective, Geometry, Shading from Antique, Outlines from the Round, etc. This College is in affiliation with the Ontario School of Art for examination purposes. Ontario Ladies' College, Whitby, also in affiliation with the Ontario School of Art, had an excellent exhibit of Freehand Drawings, Original Designs, Shading, Water Colors, etc. The Ladies' Colleges, Brantford, Hamilton, and Woodstock, had large collections of Oil and Water Color Paintings.

Extract from *Colonial Exhibition Supplement* :—

"Proceeding now to the galleries, Art is prominent on the walls of the right gallery. Here the contributions come from the Ladies' Colleges, at Woodstock, Hamilton, Whitby, Brantford, and St. Thomas, and are as varied as they are excellent in character."

The Loretto Abbey, Toronto, and Loretto Convent, Hamilton, sent Oil and Water Color Paintings, Crayon Drawings, Embroidery, Honiton Lace, Modelling in Clay, etc.

Each of the Colleges was allotted separate compartments, which were prominently labelled, showing name of Institution, name of Exhibit, Residence, Description of Work, etc.

The following remarks are from the *Globe* :—

"The Roman Catholic Colleges.—In our last issue we referred to exhibits in the Educational Court, from institutions not under control of the Education Department. Amongst these are exhibits from Roman Catholic Colleges, which are remarkable for their excellence, and at the same time are evidence of the kindly feeling which exists in Ontario between Catholics and Protestants. The Education Department of Ontario, representing as it does the Government, sets an example worthy to be copied by older countries in thus acknowledging all creeds and giving prominence to exhibits where prominence is due.

"The exhibits from the Roman Catholic Colleges are displayed so well and so conspicuously as to reflect great credit on Dr. May in the arrangement of the Court. These Colleges have their special alcoves in the centre of the principal gallery, and articles liable to injury from exposure are placed in handsome glass cases made specially for these exhibits.

"Want of space forbids our referring to all the articles exhibited. The following brief notes may, however, be of interest : The Loretto Abbey, Toronto, sends some beautiful work done by the pupils, including Oil Paintings, Oil on Velvet, Water Colors, Crayon Drawings, Embroidery, Wax Flowers, etc. It may not be generally known that this Abbey is a branch of an Institute which has been for more than two centuries devoted to the instruction of youth. The mother house was established in Rome, and so far back as 1683, houses in connection therewith were established in this country. In 1882, the community established a house at Rathfarnham, near Dublin. To this first Irish foundation the Mother Superior gave the name of 'Loretto' from he House of Nazareth, now at Loretto, in Italy. All filiations from the mother house have carled the name with them, and it has become very familiar in Canada, representing as it does cademies and convents in several of the principal cities and towns. The Toronto Abbey proides a liberal course of instruction in all branches of knowledge required in the education of

young ladies, including ancient and modern languages, instrumental and vocal music, fine arts in various branches, embroidery, needlework, etc., also domestic economy ; the same course of instruction is pursued in the main in all the Convents and Academies of Loretto in Canada.

"The collection of pupils' work from Loretto Convent, Hamilton, is also very beautiful. It embraces Oil Painting on China, Water Colors, Modelling in Clay, Satin Stitch and Applique Work, Honiton Lace, etc , and shows the results of the excellent teaching and the liberal education imparted by the ladies of Loretto.

"The Educational Court also contains large framed photographs of other Catholic Educational Institutions besides those of Loretto, including the Sacred Heart Academy, London ; Convent de Notre Dame, Peterborough, and St Joseph's Convent, Toronto. They are all magnificent buildings, in commanding and healthy positions, surrounded with spacious grounds ; and those interested in education should not fail to examine these proofs of the zeal and enterprise of the Roman Catholic ladies of Ontario."

Photographs of Toronto School of Medicine, Royal College of Pharmacy and Surgery, Kingston, and the Ontario Pharmaceutical College, were also exhibited. The *Globe* says :—

"It will, perhaps, interest some of our readers who may be visiting the Colonial and Indian Exhibition, to mention that in the Educational Court of Ontario there is a large photograph of the Ontario College of Pharmacy, and we think our Canadian friends are to be sincerely congratulated on their success in building so handsome and commodious a structure.

Conclusion.

The question may arise, What benefit has our Province derived from its Educational Exhibit in England ? To this I would reply, That amongst the five and a-half millions of visitors it has, no doubt, imparted information to hundreds of thousands of people who previously knew little or nothing of Canada. It has opened up new avenues of thought as to the value of the productions of our fertile fields, and the great wealth from our inexhaustible fisheries. It has enabled them to judge of the value of education upon the industrial development, national wealth, prosperity and happiness of our people.

It has given them a knowledge of the immense territory and natural resources of this Province, which, with a population of only about 2,000,000, has nevertheless increased nearly 500 per cent. during the past fifty years, about 100 per cent. more than the proportionate increase during the same period in the United States.

We have shown, too, that our knowledge and intelligence has been increased by our free system of education, and this is of consequence, as it is generally acknowledged that the supremacy of a nation, either in peace or war, depends upon the intelligence of its people.

In these days of science, when time and space may be said to be almost annihilated, and intercommunication between distant countries so easily established, the competition is such that it becomes necessary for manufactured goods to be of artistic design, well constructed, and at the same time produced so cheaply as possible by the aid of labor-saving appliances. We have proved that our Government assists in developing the latent talent of the industrial classes, by teaching the branches of knowledge which enables them to construct and manufacture these labour-saving appliances, so valuable in the hands of skilled artisans. If we take drawing as an example, the teaching of industrial drawing is now made compulsory in the schools, and is fostered and encouraged in the Mechanics' Institutes of this Province. Educationists and manufacturers both say that industrial drawing is the foundation of industrial education ; they substantiate this by showing that every mechanic should possess some knowledge of drawing, and prove from calculations that the productive efficiency of machine shops would be increased one-third if every mechanic could read working drawings so as to work by them.

In this manner our Educational Exhibit has enabled the people of different nations to judge for themselves of that system of education, which we claim has promoted and inculcated self-reliance, preserving industry and rapid advancement in all which tends to the civilization and prosperity of a country.

I may further state that the Educational Exhibit from Ontario was of great interest in England last year, because of the recent change in the school law, requiring school

fees to be paid in advance. In London the fees are fixed with reference to the social condition of the neighborhoods in which the schools are placed. The average fee of the London School Board is a small fraction over four cents per week.

The new law requires these fees to be paid in advance, and if not paid the parents are prosecuted in a criminal court, for the technical legal offence of not having sent their children to school. This law came into force on the 4th October, 1886, and the day preceding (Sunday) a mass meeting was held in Trafalgar Square, denouncing this new rule of the School Board and advocating free education. The excitement was considerable, and the press, generally, discussed the question as to *Fee* or *Free* Schools.

As may be supposed, numerous enquiries were made as to the working of the Ontario Free Public Schools. I gave all the information in my power, and liberally distributed the pamphlets relating to the School System of Ontario. I also sent copies of the pamphlet to the members of the London School Board, at the same time offering to meet them, individually or collectively, to give any further information if required. Finally, at the request of several prominent educationists, I prepared the following letter, which, by the courtesy of the Editor, was published in the *Schoolmaster*, the leading educational paper in the United Kingdom :—

FREE EDUCATION IN THE PROVINCE OF ONTARIO, CANADA.

In consequence of the recent discussion in the public press on Free Schools, I have had numerous inquiries at the Colonial Exhibition as to the management of the Free Schools of Ontario ; and as the question of *free* or *fee* still continues to be agitated, it has been suggested to me that before leaving England I make known to the public, so far as possible, the educational system in relation to Free Schools in Ontario ; and as I know of no better channel than the *Schoolmaster*, I have to ask you kindly to give space in your valuable columns for that purpose.

I shall not make comparisons of the methods employed in other countries, neither shall I take up space by giving a detailed historical sketch of the rise and progress of our public school system, which commenced so far back as 1816, but refer only to the present position of the Free Public Schools of Ontario, and to make this more comprehensive I shall divide the subject into different headings.

Administration.

The administration of the Educational System of Ontario is provided for by statute as follows :—There shall be a Department of Education, which shall consist of the Executive Council, or a committee thereof, appointed by the Lieutenant-Governor ; and one of the said Executive Council, to be nominated by the Lieutenant-Governor, shall hold the office of " Minister of Education." It will thus be seen that the Minister of Education is under control of the representatives of the people.

The duties of the Minister of Education are very onerous, amongst which he has power to make regulations for the classification, organization, discipline, and government of Normal, Model, High, Public, and Separate Schools ; for the equipment and ventilation of school-houses ; for the arrangement and requisites of school-premises ; for the authorization of text-books for the use of pupils ; to appoint Inspectors of High Schools, Separate Schools, and County Model Schools, Masters of Provincial Normal and Model Schools, and Directors of Teachers' Institutes ; to provide for the training of teachers ; to make regulations for granting the pensions provided by law for superannuated Inspectors and Teachers, etc.

I noticed in the press of last week that Mr. Matthew Arnold, in his parting words to the teachers assembled together to do him honor on his retirement from public life, said : " Insist on having a Minister of Education. What we want in a Minister of Education is this : a centre where we can fix the responsibility. Insist, therefore—as you, the chief sufferers, by mistakes and neglects in the management of Education, have a right to insist—insist on having a Minister of Education."

I need only remark that in Ontario we have a responsible Minister, who is responsible to the teachers and responsible to the people, and the advantage of this system is,

that we can get a thoroughly practical man. The present Minister of Education, the Hon. George W. Ross, LL.B., has been a Public School Teacher and Inspector, and Model School Inspector. He is, therefore, conversant with all the details of school management; and his administration gives satisfaction to Teachers, Inspectors, and School Trustees, as well as to parents and children.

Free Schools.

All *Public Schools in Ontario are free schools*, and every person between the age of five and twenty-one years has the right to attend some school.

In 1850 the Legislature invested each school division, or section, with power to decide annually for itself whether the schools should be entirely free. In 1866 the ratepayers themselves had made more than four-fifths of the schools free. The question of free schools was subsequently thoroughly discussed, and it was decided that the property of all should be made liable for the education of all. There was an almost unanimous opinion that all persons shonld contribute to the education of the youth of the land according to the amount of property they possessed, it being contended that property is better protected and increased in value where the education, intelligence, industry, and enterprise of all the people are encouraged. The Public Schools were thus all made absolutely free by the voice of the people.

Local Management, and Appointment of School Trustees.

A system of Municipal or Local Government is uniform throughout the Province, which rests upon the free action of the ratepayers of each municipality. The organization comprises minor municipal corporations, consisting of townships; county municipalities governed by a council of the heads of the minor municipalities; villages with a population of over 750; towns with a population of over 2,000; and cities with a population of over 10,000. The Rev. Dr. Ryerson, the founder of the Ontario System of Free Schools, thus describes the facilities afforded to educational progress by the municipal system:—"It is in Upper Canada (now Ontario) alone that we have a complete and uniform system of municipal organization, from the smallest incorporated village to the largest city, and from the feeblest school section and remotest township to the largest county or union of counties—the one rising above the other, but not superseding it—the one emerging into the other for purposes of wider expansion and more extensive combination. By their constitution, the municipal and school corporations are reflections of the sentiments and feelings of the people within their respective circles of jurisdiction, and their powers are adequate to meet all the economic exigencies of such municipality, whether of schools or roads, of the diffusion of knowledge, or the development of wealth."

On the incorporation of any city, town, or village, an election of school trustees is held; the persons qualified to be elected trustees must be actual resident ratepayers—that is, assessed householders, whether owners or tenants, or persons assessed for income; and every ratepayer of the age of twenty-one years, who resides within the municipality, is entitled to vote at any election for school trustee, or on any other school question. Therefore the trustees are appointed and controlled by the people themselves. As representatives of the people, they are practically the owners of the schools.

Duties of School Trustees.

The trustees prepare the estimates of the sums required for all school purposes, including purchase of Site, Building, Furniture, Teachers' Salary, etc.; these estimates are laid before the Municipal Council, which has power to levy and collect upon all taxable property within the municipality sufficient sums to meet the requirements of the school trustees.

The trustees are under obligations to provide adequate school accommodation, as defined by the Education Department, for two-thirds of the actual resident children of school age; to appoint a sufficient number of teachers, who must possess the qualifications required by the Department; to permit all children of school age to attend school *free* of

charge. To see that no unauthorized books are used in the school, and that the pupils are supplied with a uniform series of authorized text-books sanctioned by the Education Department. To provide maps, apparatus, libraries, etc. To take possession and have the custody of all public school property. To visit the schools under their charge from time to time, and prepare annual reports on forms prescribed by the Education Department. They have the power of dismissing refractory pupils, and they can exempt indigent persons from the payment of school rates. They are bound to keep the schools open the whole year, except during vacations.

Legislative Assistance.

Large sums are annually granted by the Legislature to be apportioned by the Minister of Education amongst the municipalities, on condition that they raise by rate a sum equal, at least, to that apportioned to them, both amounts being solely devoted to the payment of teachers' salaries.

The Legislative Grant averages only about 7 per cent. of the total amount raised for public schools. The amount of Legislative Grant in 1884 was two hundred and sixty-seven thousand dollars, whilst the total receipts for all public school purposes was no less than three million, seven hundred and thirty thousand dollars.

This, of itself, is a sufficient proof of the excellence and popularity of the Free School system, inasmuch as the people voluntarily tax themselves for it maintenance and support.

Public School Inspectors.

The Inspectors are appointed by the municipal councils, and must have had practical experience in teaching. They must either be holders of first-class provincial certificates, or graduates in arts, with first-class honors, of a provincial university, and furnish evidence of having taught successfully for five years, of which three at least must have been spent in a public school.

The duties of an Inspector are to examine into the methods of instruction, ascertain the progress made by the pupils, see that the schools are properly equipped, and that no unauthorized books are used in the school. They have the power to withhold the school grant; they apportion the school grant according to the average school attendance of pupils; they can grant temporary certificates for teaching, or suspend teachers' certificates for cause. They have to report to the Education Department, and see that its laws and regulations are observed.

The powers of Inspectors are very great, but they are trained, responsible men, in whom the ratepayers have confidence; and that it is not misplaced, can be judged from the great progress made in the education of the children, as evidenced by the exhibits of pupils' work at the Colonial Exhibition, which received commendatory notices from leading educationists and the press in general. Nearly every school under their inspection is provided with wall maps, the total number in use being over 40,000; a large number of the schools are also supplied with globes and school apparatus. Great improvement has been made in the school buildings, which are now well ventilated, and provision made for the comfort of the children by properly constructed seats and desks, etc. "School architecture has made wonderful progress in the Province, because the Inspectors advise with the trustees, in erecting good permanent buildings, adapted for school purposes. The large photographs of our Schools at the Exhibition were admired by thousands of persons, who were surprised to find that, with a population of less than two millions, we have 5,375 Public Free Schools, many of which, in architectural beauty of design, are equal to those found in older and wealthier countries. As stated at the commencement, it is not my intention to discuss school methods, but I do most earnestly direct attention to the importance of having school Inspectors selected from trained teachers, and invested with all the necessary powers to promote the efficiency and general welfare of the schools in their charge.

Public School Teachers.

The conditions on which public school teachers' certificates may be granted, are prescribed by the Department. The certificates issued are—first-class, grades A, B, and C; second-class, and third-class. First and second-class certificates are valid throughout the Province, and are held during good behavior, while the third-class are limited to a period of three years. The holder, however, may, on passing the Departmental Examination, obtain a renewal of the same for three years, subject to attendance at a County Model School. There can be no renewal without re-examination. In an emergency the Minister of Education has power to extend the duration of a certificate. Third-class certificates are granted by County Boards of Examiners, the School Inspector being chairman of the examining board in his district. Second-class certificates are granted only on condition that the candidates have passed the non-professional examination in literature and science, held at the High Schools; must have taught successfully for at least one year in a Public School in the Province, and must have attended for one session a Provincial Normal School.

First-class certificates are granted only upon the following conditions:—That the candidate (1) must be the holder of a first-class non-professional certificate; (2) must have passed the professional examination for a second-class certificate; and (3) must have attended a training institute for one session, and passed the prescribed examination thereat.

In 1884 Ontario had 7,085 public school teachers; 235 held first-class certificates; 2,237 held second-class certificates; and 3,420 held third-class certificates; the balance having temporary certificates. The number of male teachers was 2,789, and female teachers 4,296.

The Minister of Education, in his annual report of 1884, says, in reference to the standard of the teachers employed: "It will be noticed that there is an increase of twenty-four in the number holding provincial first-class certificates. This increase, in view of the demand for teachers possessing the highest attainments, is very gratifying. Owing to the superior culture required for teachers of this rank, the number eligible for a certificate is necessarily limited. There is, also, a very large increase in the number holding second-class certificates, namely, from 1,201 in 1876 to 2,237 in 1884, while at the same time the number of third-class teachers is being gradually reduced. These are two very satisfactory features of the progress of education. The steady increase in the number of teachers of a higher grade shows:—(1) That the facilities afforded by our High Schools for a higher education are made use of. (2) That those entering the profession are disposed to seek the higher literary culture which a second-class certificate represents, and (3) That those possessing that higher culture are sought for by Boards of Trustees. It must not be forgotten that, other things being equal, the best educated man or woman invariably makes the best teacher. There is still, however, a tendency on the part of some teachers to remain satisfied with any qualification which entitles them to conduct a Public School."

The Minister, in referring to the marked increase in the salaries of teachers during the past few years, says: "There is a considerable discrepancy still between the salaries paid to females as compared with males. Why should this be, when the services rendered are, in most cases, of equal value?"

The Public School Teachers of Ontario are, as a class, an influential body. They are popular, well-educated men and women, careful and painstaking, endowed with zeal and energy in promoting the great cause of education, having a fellow-feeling and sympathy with each other; with a proper estimate of the dignity of their profession, and a desirability that it shall never be disgraced by word or deeds of theirs. It is not surprising, in such a large and influential body, many of its members rise to positions of prominent honor in Ontario. The Minister of Education at one of the High Schools, in a speech last month, said:—"The Ontario Assembly contained, perhaps, more teachers in proportion to its members than any other legislative body in the world, and men on both sides of the House were willing and able to aid and improve the educational system."

In my own experience I have known Public School Teachers become leading statesmen, eminent divines, celebrated lawyers, and distinguished physicians. There is no

reasonable limit to the position to which they may aspire, and within their reach for the true advancement and government of their country; for although they may not, like natives of the neighboring republic, aspire to become President, we have a proof that one of their co-workers holds one of the most prominent and important positions in the country, as Minister of Education.

The Legislature is most liberal in promoting the welfare of teachers; it provides free education for them at Normal Schools, Model Schools, and Training Institutes, and also assists by liberal grants towards supporting a Teachers' Institute in each county inspectoral division, having for its object the reading of papers and the discussing of matters that have a practical bearing on the daily work of the school-room. The Director of Teachers' Institutes visits the Institutes, and takes part in the proceedings by discussing at least three subjects on the programme, and by delivering a public lecture. Every teacher, unless prevented by illness, must attend continuously the meetings, which last for two days.

Departmental Regulations.—Accommodation for Pupils, School Furniture, Etc.

The trustees are required by law to provide sufficient accommodation for at least two-thirds of the population between five and twenty-one years.

The school site must be in a healthy locality, with proper drainage. The water-closets for the sexes must be several feet apart, and proper care taken to secure cleanliness, and to prevent unpleasant and unhealthy odors.

The school-house must have an additional room for every fifty persons. In each room there should be at least 250 cubic feet of air-space for each pupil. Arrangements must be made for ventilation so as to secure a complete change of atmosphere three times every hour. There must be separate entrances and suitable cloak-rooms for boys and girls.

The desks and seats are usually so graduated in size that the pupils' feet may rest firmly upon the floor, and the backs of seats slope backward from the perpendicular to add to the comfort of the pupils.

Under the regulations, every school should be supplied with at least, Blackboards, 9-in. Globe, Maps of Canada, Ontario, World, the different Continents, Tablet Reading Lessons, Numeral Frame, Dictionary, Gazetteer, etc.

These regulations are applicable, more especially to schools in rural districts, as the schools in cities, towns, and villages are usually well equipped with maps, apparatus, reference library, etc.

Departmental Regulations.—Text-Books.

The programme of studies prescribed for use of Public Schools is as follows:—Reading and Literature, Spelling, Othography, and Orthoëpy Writing, Arithmetic, Drawing, Geography, Music, Grammar and Composition, History, and Object Lessons. Other subjects recommended to be to be taught are Hygiene, including Temperance, Drill and Calisthenics, Moral and Religious Instruction, Reviews and Recitations, and Agriculture in Rural Schools.

The Department of Education has the authorization of the text-books used by the pupils; and recently, under the direction of the Minister of Education, an admirable set of readers adapted to the country has been published, also a set of Drawing Books, Works on History, Hygiene, Scripture Readings, etc. Some of the other text-books used are by Canadian authors, and others reprints of English publications.

The advantages from a uniform set of text-books cannot be over-estimated. They are selected by a Central Committee of Examiners, all experienced, competent advisers. They are suitable to the youth of our country, and should a pupil remove from one part of the Province to another, the same set of books can be used; and, moreover, there is no temptation for interested persons to recommend publications from which they might reap a profit.

Drawing has only been made compulsory since July, 1885, but its importance as a branch of education is already fully recognized. It is the written language of the eye, with an alphabet of only two letters—the straight line and the curve. It is especially the language of mechanics and workmen, and most valuable in the manufacturing progress of a country.

Departmental Regulations—Religious Instruction.

Every school is opened with the Lord's Prayer, and closed with reading portions of Scripture taken from selections authorized for that purpose by the Department, and must be read without comment or explanation, but no pupil is required to take part in the religious exercises against the wish of his parent or guardian.

The clergy of any denomination have the right to give religious instruction to the pupils of their own church in each school-house at least once a week.

It will thus be seen that everything in reference to religious exercises is left to the parents and guardians of the children, the Government exercising no authority, but fully recognizing and protecting the rights of conscience and parental authority in all religious matters.

Compulsory Attendance.

The parent or guardian of every child, not less than seven years nor more than thirteen years of age, is required by law to cause such child to attend a public school or some other school in which elementary instruction is given, for the period of 100 days in each school year, unless there be some reasonable excuse for his non-attendance.

The law is very explicit on the duty of guardians. It says :—"Any person who receives into his house a child of any other person, under the age of thirteen years, and who is resident with him, or in his care or employment, shall be deemed thereby to be subject to the same duty with respect to the elementary education of such child during such residence, and shall be liable to be proceeded against as in the case of a parent, if he should fail to perform his duty of causing such child to be educated to the extent required of a parent."

Children employed in factories are only compelled to attend one-half of the whole time required by the Act, provided they have certificates from the School Inspectors that they have passed an examination prescribed by the Education Department.

As a rule, no compulsion for children to attend school is required, the parents and children themselves seem to appreciate the true value of education. The compulsory clauses in the School Act, however, shows the taxpayer, who is rated without his consent for school purposes for the public good, that children are compelled to attend school.

School Purposes.

The term "Separate School" applies to Protestant and colored persons as well as to Roman Catholics ; but this exception to the general public school system is confined chiefly to Roman Catholics, who desire to establish Separate Schools in localities where their supporters are sufficiently numerous to support one. The principle of the Schools is, that any Roman Catholic ratepayer may elect to support a Separate School, and upon giving the prescribed notice he is exempted from the Public School rates. These Schools are governed by trustees, who are elected by the supporters of such Schools, and are a corporation with powers similar to those of other school trustees. The teachers are required to possess proper certificates of qualification, and the Schools share in the Legislative Grant in proportion to the attendance, and they are also subject to inspection by the Education Department, two Inspectors having been appointed for that purpose. In case of any disagreement between the Separate or Public School corporations and the municipal bodies, such dispute is subject to the arbitrament of the Minister of Education, with the right to appeal to the Lieutenant-Governor in Council.

There are 207 Roman Catholic Separate Schools in Ontario.

Concluding Remarks.

Every year's experience shows more fully that the Free Public School System in Ontario is founded on the true principle for the education and advancement of the people. The Government, knowing that education has the effect of sharpening the perceptive, and strengthening the reasoning faculties, considers that the education of all the youth of the country is a national duty, to which every person should contribute according to the property he possesses, and which is protected for him by the State.

Every facility is provided for the training of teachers. (*The Times*, September 21st, says:—"Evidently very great care is bestowed on the training of teachers for the various classes of schools in Ontario. The examinations which they have to undergo are formidable and comprehensive, and for the higher grades quite as formidable as that of the London B. A., and far more varied.") Every precaution is taken to secure in them good moral character, as well as competent literary qualifications; and the result is that many of the children of the poorer classes, by their intelligence, industry, and perseverance, have become leading men in the professions, prominent merchants, and holders of other positions of trust in the country.

It is true that it causes a kind of levelling process, as the children of the poor man sit side by side and compete with the children of the rich man. It might be considered in some countries as partially breaking up the distinctions of class, but we find that it teaches self-respect, and all classes learn to know and respect each other.

The result of our education is that we have individual security, public peace, and that freedom of action consistent with rational liberty in a country which is rapidly increasing in wealth and prosperity.

Although far removed from the splendor of royalty and the influence of a court, we train our children to be law abiding. We are loyal subjects of our Queen, and we love and venerate our mother country; not from antiquated prejudice, nor reluctantly tolerated from a sense of duty; but, on the contrary, it is cherished in our affections, and supported by the freewill of a people whose love of order has been strengthened as their knowledge has increased, who value that Government which so ably affords security to life and property, and whose laws ensure the actual enjoyment of all that deserves to be dignified with the name of freedom.

In conclusion, I may state that the Free Public School System of Ontario is generally acknowledged to be equal to any in the world. It has been imitated by other countries including some of the neighboring states and, at least, one colony in Australia. And in addition to this grand scheme for primary education, there are provisions for secondary and higher education, which are essentially free; and the poor man's son, provided he has talent and energy, receives free education from the Public School to the University.

With a population less than 2,000,000 we have upwards of 5,000 Public Schools nearly 200 Classical Schools, Colleges and Universities, and 150 Mechanics' Institutes and Art Schools, where adults can obtain a practical knowledge of subjects connected with their various trades and employments.

As stated in the public press, the goods exhibited in the Canadian section of the Exhibition show great advancement in the various manufactures; the workmanship is excellent, the designs are good, and there is ingenuity in construction, which can only be attributed to the practical education of the people.

I have endeavored to show this during the past few months; I have also sent copies of a pamphlet relating to the Educational System of Ontario, and a catalogue of our exhibits to H. M. School Inspectors, Clerks of School Boards, and the members of the London School Board; and I shall be pleased, during the short time at my disposal, to give any further information, if required.

S. PASSMORE MAY, M.D.,
Commissioner of Education.

Colonial Exhibition Building, London, November, 1886.

As very few persons in this country are familiar with the School Statistics of the United Kingdom, I take this opportunity of stating that in 1885 there were 29,912 Elementary Schools inspected, with accommodation for 6,734,423 pupils. The actual attendance was 4,329,324. Within the past twenty years the schools have increased over fifty per cent. and school attendance over seventy-five per cent., although the population has only increased about twenty-five per cent. during the same period.

The cost to the country for public education is very great, the sum submitted on the Civil Service estimates for 1887 is $23,876,625. It is money well expended, however, for crime has diminished in proportion as public education has increased. The number of committals for criminal offences in 1865 was 27,388, in 1885 the number was 18,500.

It is worthy of notice here, that whilst free education costs the Province of Ontario only about fifty-seven cents per pupil, the amount for education, not free, paid by the Government of the United Kingdom, is over $5 per pupil.

It will be seen from this report that every opportunity was taken to bring before the public the excellence of our educational system, and the agricultural and commercial advantages we possess in this province.

I may remark, too, that I referred to this on different occasions at public meetings, where I had the privilege of giving addresses, including the Guildhall, London College, Training Colleges, Public Libraries, etc. Some of these meetings were largely attended. For instance, at the Guildhall some thousands of persons were present at the presentation of the Queen's prizes, Science and Art Department. The Lord Mayor was in the chair, and Prince Henry of Battenburg gave his first address in public. On this occasion I referred to our Free Education, the influence of Industrial Drawing on manufactures, and the commercial progress, natural resources, climatology, etc., of this province. On the following day I received a letter from the Principal of the Technical Schools, thanking me for my attendance and address.

In conclusion, I cannot refrain from acknowledging my sincere thanks to Sir Charles Tupper, the Executive Commissioner for Canada, and Mr. C. C. Chipman, Accountant of the Canadian Commission, for their many acts of kindness, and the personal interest they always took in promoting and forwarding the interests of the exhibitors and representatives of the Educational Court of Ontario.

The following Provinces, in addition to Ontario, sent educational appliances and pupils' work, which were exhibited in an annex adjoining one side of the Ontario Educational Court:

Province of Quebec.

The educational exhibit of this Province was represented during the Exhibition by the Hon. Gideon Ouimet, Superintendent of Public Instruction.

Their special catalogue shews that they had 164 collections of educational exhibits, which were classified as follows:—1. Department of Public Instruction, including Reports, School Acts, Text Books, etc. 2. Universities—Photographs and Books. 3. Classical Colleges—Photographic Views, Books, etc., from six Colleges. 4. Normal Schools—Specimens of pupils' work, Text Books, etc. 5. Academies, Model Schools and Elementary Schools—Photographs and pupils' work, including Writing Books, Daily Exercise Books, Needlework, Drawing Books, Map Drawing, etc., from eighty-five schools. 6. City of Montreal, Roman Catholic and Protestant Board of School Commissioners—Photographs and pupils' work, consisting of Writing Books, Exercise Books, Book-keeping, Map Drawing, Head Drawing, Landscape Drawing, Painting on Satin, Needlework, Crotchet-work, etc., from sixty-four schools.

The pupils' work was chiefly exhibited in handsomely bound albums, the contents of which were greatly admired by those interested in education, containing as they did a great variety of well executed examples of the ordinary school work of the children.

The Commissioners publish the following as a preface to their catalogue:

"The Educational exhibit which we have prepared, does not adequately represent the state of education in the Province of Qnebec. The short time which our superior educational institutions and our elementary schools had to prepare for the great educational display has prevented many institutions from taking part. Several of our scholastic institutions, which could have prepared excellent exhibits, finding themselves unprepared

and fearing that they might compromise their well-deserved reputation by a hurriedly prepared exhibit, have abstained from taking any part in the present display. Such as it is, our exhibit represents the regular work carried on in our elementary schools and in our institutions of superior education; and we venture to hope that, under the circumstances, these illustrations of the results of our educational system may meet with the approval of the specialists appointed to examine them."

The Council of Arts and Manufactures of the Province of Quebec, also exhibited a collection of drawings done in the class-room by pupils from fourteen to twenty-one years of age.

New Brunswick.

This exhibit was represented by Mr. Ira Cornwall, jr. It consisted of:

School Work:—

Specimens of Print Script Exercises, Writing, Maps, Industrial Drawing, Sewing and Knitting. (Arranged in bound folios.)

School Furniture:—

Desks and Seats, and Teacher's Desk.

Text-books:—

One copy of each Text-book prescribed for use in the Schools of the Province.

School Apparatus:—

One Set Drawing Models; one Set Blocks to illustrate Form; one Set Natural History Series to illustrate Plant and Animal Life; Weights and Measures; Specimens of New Brunswick Woods and Minerals, as used for illustrative purposes; Crayons and B.B. Rubbers; Ball Frame; Map of New Brunswick.

School-houses:—

Photographs of School-houses and of Class-rooms; Plans of School-houses.

School System:—

Outline of School System; Outline of Course of Instruction; School Manuals.

School Reports:—

Annual Reports; Blank forms for Inspectors' Reports; Blank Forms for Trustees' Returns and Teachers' Reports.

School Registers, etc.:—

School Register and Cover; School Licenses; Provincial School Drafts; County School Fund Drafts.

The Academy of Arts and Free Night School, St. John, New Brunswick, sent a collection of Freehand Drawings from Nature in Charcoal and Crayon.

Nova Scotia.

The Hon. Wm. Annand represented this exhibit, which consisted of a collection of School Desks and a Teacher's Desk, manufactured in Nova Scotia.

School Cabinet of Nova Scotia Minerals (arranged by Pupils of Pictou Academy).

Etomological Collection, in twenty-four cases, (Pictou Academy).

Case containing Prescribed Text-books.

Six Drawings of Prescribed Plans for School-houses.

Eight Photographic Views of Educational Buildings.

Collection of Maps, Copy-books, Essays, Text-books, etc., etc., illustrating Work and System of the Institution for the Deaf and Dumb, Halifax, Nova Scotia.

Collection illustrating the System of the Halifax School for the Blind, with specimens of Pupils' Work.

Large Portfolio containing specimens of Needlework by Pupils of the Public Schools of Nova Scotia.

Collection of Maps drawn by Pupils.

Collection of Drawings by Pupils.

Four Portfolios containing specimens of Pupils' Work in Drawing, Map-making, Grammatical Analysis, Parsing, Penmanship, etc.

Specimens of Educational Forms.

Collection of Reports, School Law Manuals, Courses of Study, University Calendars.

Small Collections of Sundries, Woodwork by Pupils, etc.

Drawings by Pupils in the Provincial Normal School, Truro.

Prince Edward Island.

Collective Exhibit :—

St. Dunstan's College.—One book containing one small and four large Architectural Elevations ; one Tracing Book do.

Prince of Wales College.—One book containing one Illuminated Title, Pen work, and four Maps.

Public Schools.—One Book, twelve Maps.

St. Dunstan's College Examination Papers.

One Album of Penmanship, do.

Examination Papers, Prince of Wales College.—Charlottetown Public Schools, Marshfield—St. Peter's Boys' School.

Three Copy Books, Elementary.

Collection of Text-books for Schools and Colleges.

Departmental Reports, etc.

Manitoba.

Collective Exhibit of Educational Appliances, Books, Exercises, etc., from the Catholic Schools of the Province.

Educational Exhibit, consisting of Primary Reading Charts, Text-books, School Furniture, and samples of Pupils' Work on Writing, Composition, Book-keeping and Map Drawing, from the Protestant Schools of the Province.

APPENDIX.

OTHER COUNTRIES WHICH EXHIBITED.

In order to show the extent of the British possessions and how universally Her Majesty's subjects united to make known the greatness of the British Empire by exhibiting the products, manufactures and educational appliances of their respective countries, I shall give a brief historical sketch of each country from facts collected from authorities at the exhibition, and from their spocial reports, with short notices of their educational systems and exhibits.

The accompanying map is colored (*red*) to show the geographical position of each of these countries.

AUSTRALASIAN COLONIES.

Australia.

Australia was originally a simple Crown Colony; the first settlement was made by the British Government at Sydney, in 1788. At present Australia is divided into five Colonies; all on the mainland, viz.: New South Wales, Victoria, South Australia, Queensland and Western Australia.

Each of these Colonies is presided over by a Governor appointed by the British Crown, but with the exception of Western Australia otherwise self-governing.

New South Wales.

New South Wales, the oldest Colony of Australia, was discovered by Capt. Cook in 1770. The first governor was appointed by the British Government in 1787, and the Colony of New South Wales was formally declared to be founded in 1788.

In 1851 the south-western districts of New South Wales were formed into the Colony of Victoria, and in 1859 its northern districts into the Colony of Queensland.

It is bounded on the *north* by Queensland, on the *west* by South Australia, on the *south* by Victoria, and on the *east* by the Pacific.

It includes an area of 309,175 square miles, and in 1886 the estimated population was 981,000. Its chief product is wool, which is exported to England. It was in this Colony that gold was first found in Australia, in 1851. The aggregate value of the gold mines up to 1884 was $176,807,750. Coal is also found in abundance; the aggregate value of coal mining up to 1884, was $78,546,400. Other minerals are also abundant in New South Wales; the aggregate mineral wealth of all kinds up to 1884, being $320,342,925

New South Wales is rich in educational institutions. Sydney, the principal city, has a population of 250,000, and is the first town in Australia that was settled. There is a University, Denominational College, Grammar School, School of Arts, Technical, Industrial and Sanitary College and Museum, Natural Art Gallery, Free Public Library, Public Schools, etc.

The Public Instruction Act which is administered by a responsible Minister, came into operation in 1880. The schools are entirely undenominational, and the attendance of children between the ages of six and fourteen years of age is compulsory. The school fee is 3d (6 cents) per week per child, and the fees collected are paid into the treasury as revenue. Provision is made for educating children whose parents are unable to pay fees. Teachers are recognized as civil servants, and paid by salary out of the public funds. School Buildings are erected wholly at the expense of the Government.

Since 1861, Parliament has voted nearly $30,500,000 for Primary Schools. The annual expense for school sites, buildings, furniture, etc., averages over $3,500,000.

In 1885 there were 2,046 State School in operation, viz.: 8 High Schools, 26 Superior Public Schools, 1,532 Public Schools, 294 Provincial Schools, 150 Half-time Schools, 50 House-to-house Schools, under itinerant teachers, and 12 evening Public Schools. There are also two Training Schools for teachers. The total school population is nearly 280,000, nearly a third of the entire population of the Colony.

Educational Exhibit.

The greater part of their educational exhibit was from the Technical College, Sydney; it consisted of specimens representing the following classes:—1. Modelling, Plaster Casts; 2. Carpentry and Joining, practical; 3. Masonry, arches, etc.; 4. Naval Architecture, models, etc.; 5. Plumber's; 6. Art Class, drawings; 7. Carriage Building, drawings; 8. Carpentry and Joining, theoretical; 9. House Painting, graining and marbling; 10. Art Decorations, ornaments; 11 Architecture, drawings.

A Geological Class Map was also exhibited by this College.

Twelve Public Schools sent exhibits of pupils' work, consisting chiefly of sewing and fancy work, which was in great variety and well executed; the few specimens of writing and map drawing sent were not sufficient to judge accurately of the general work done in these branches.

The Surveyor General, the Government Astronomer and the Minister for Mines, sent several very finely executed maps and charts for scientific purposes.

There were also private exhibits of drawing models and scientific apparatus.

Victoria.

This colony lies at the south-eastern extremity of the Australian continent; its area is 88,198 square miles. Although the least of the Australian colonies it is the most populous, having one million inhabitants. Victoria was first settled in 1833, by an Englishman; it then formed part of New South Wales, and was known as the Port Philip District. Melbourne its chief city, which now has a population of 325,000, was founded in 1837.

In 1851, Port Philip became a separate colony, and was named "Victoria" in honor of the young Queen. In this same year (1851) the discovery of gold gave the colony an impetus, which is said to have "uplifted the colony in a night to the position of a nation and a power in the world, and advanced her destinies hundreds of years at one bound." Victoria was crowded with searchers for fortune from every quarter of the globe, in one year nearly 80,000 immigrants being added to the population of the colony.

The total value of gold raised in Victoria from 1851 to 1885 is estimated at over $1,500,000,000.

During this year (1851) the first Lieut-Governor was sworn in. Responsible government was not, however, introduced until 1855.

They have a system of State Education in Victoria, the basis of which is that secular instruction shall be provided, without payment, for children whose parents may be willing to accept of it, and that whether accepted or not, satisfactory evidence must be produced that all children between the ages of six and fifteen are educated up to a given standard. The result is reported as very satisfactory. In 1881, of every 10,000 children of school age (between the age of six and fifteen), 9,481 could read, and 8,535 of them could write.

Schools of Mines have been established at Ballarat and Sandhurst, to which are attached museums, containing geological and technological specimens, models of mining machinery and mining plant, sections of mines, etc. There are 880 students in these two schools.

Schools of Design have also been established at twenty-five other places in Victoria, for promoting technological and industrial education. There are over 2,800 pupils on the rolls of these schools. An exhibition of the pupils' work is held yearly in Melbourne and local exhibitions are held in other cities and towns.

They have also a University, which, in 1880, was thrown open to females, who are admitted to all its corporate privileges, except as regards the study of medicine.

In 1884, the number of students who matriculated was 173, of whom nine were females.

Educational Exhibit.

This colony had a small educational exhibit, but there was no attempt to make it a prominent feature in their section of the Exhibition.

The Minister of Education sent a small collection of specimens of pupils' work, Models of Schools, and Photographs, with an Excellent Map showing the whole of the State Schools in the colony.

The Victorian Deaf and Dumb Institution sent specimen exercises on Written Language, Writing, Arithmetic, and Drawing, Photographic Views, Statistics, Reports, etc.

The Victorian Asylum and School for the Blind sent Baskets, Mats, Nets, Woolwork, etc., the work of the pupils, also Photographic Views of the Buildings and Pupils at Work.

Trinity and Ormond Colleges sent photographs.

The Oberville School of Art sent examples of Sculpture, Drawing, and Painting in Oils, and Imitation Tapestry.

Private exhibitors sent some Object Lessons and Philosophical Instruments, and the public departments exhibited Maps and Charts, including a raised Map of Victoria, showing existing and proposed lines of railways.

The pupils' work exhibited was excellent, and it is to be regretted that a larger collection was not sent.

SOUTH AUSTRALIA.

This colony is, with the single exception of Western Australia, the largest of all the Australian colonies, stretching across the whole island continent from south to north. The total area is 903,690 square miles. The population, according to the latest official record (1884), was 312,781.

In 1831 Captain Sturt discovered the River Murray, which runs down into South Australia, and empties itself into the Southern Ocean, but it was not until December, 1836, that the first Governor of South Australia took possession of the land in the name of the Sovereign of Great Britain.

Although gold is found in small quantities only, the copper mines of this colony have produced great mineral wealth.

The education of the people received legislative attention very early in its history. The first Act relating to education was passed in 1847. This was suspended in 1851 by an Act, the expressed object of which was to impart good secular instruction, based upon the Christian religion, apart from all theological and controversial differences on discipline and doctrines, and a Central Board of Education was established.

In 1875 an Act was passed which abolished the Central Board of Education, established a Council of Education; attendance of children between the ages of seven and thirteen years was made compulsory, and fees were authorized to be charged.

In 1878 the Council was dissolved, and the administration of the Education Department transferred to a "Minister Controlling Education," assisted by an Inspector General of Schools, with a staff of Inspectors and Teachers.

In 1884 there were 452 Public and Provisional Schools; 42,758 children received instruction from 400 male and 600 female teachers. The total expenditure upon education (exclusive of buildings) was, in 1884, over $500,000.

About 390 schools have been erected since January 1st, 1876, at a cost of upwards of $2,000,000.

Scholarships, exhibitions, and bursaries, are open to the pupils at public schools, with the advantage of education at the Adelaide University, or any approved European University. As an illustration of this, in 1878, a scholar won an exhibition at one of the Model Schools: this entitled him to free education at Prince Alfred College (the semin-

ary selected by him), and in 1884 he won the South Australian Scholarship, which is worth $1,000 per annum for four years.

In addition, the Education Department offers annually three University Scholarships (worth $250 per annum for three years), which entitle the holders to education at the Adelaide University free of cost. Six exhibitions, for scholars at the public schools, of the value of $100 to $200 each, are also available annually, and entitle the holders to free education at any of the colleges which they may select. Bursaries of the value of $60 are also offered by the department of girls.

Educational Exhibit.

The Inspector General of Schools sent a small exhibit, consisting of Maps and Plans used in the Education Department, Two Maps of Australia. Set of Arithmetical Diagrams, and Copies of Course of Instruction, Time Tables, Calendar, and Education Gazette.

The Superintendent of Poonindie Native Institution exhibited specimens of writing done by native children, also a small cottage, picture frames, and brackets made of cones.

A private exhibitor sent an Educational Object Lesson, "The Gospel Ship," and some Maps and Diagrams were exhibited from different government departments.

QUEENSLAND.

Queensland, comprising the north-eastern part of Australia, has an area of 668,224 square miles, and a population of about 300,000. It is quite a new colony, only sixty-two years ago (1825) a penal settlement was founded at the mouth of the river. In 1839 the last batch of convicts was landed there. Ten years later the first free immigrants arrived and settled down near Brisbane, the capital, which has now a population of 40,000.

In 1859 the colony of Queensland was proclaimed by Imperial command, and since that time its progress has been very great. Immediately after its separation from New South Wales a system of National Education was inaugurated, it being contended that as education progressed, crime would be lessened, and thus the colony would reap a direct advantage from the money devoted to educational purposes. A Board of Education was appointed, and a Normal School, for the training of teachers, was built in Brisbane, and Schools in towns and country districts were built on a requisition of the residents, accompanied by an amount equal to about one-fifth of the estimated cost of the building. On these conditions, wherever there were twenty children above five years of age, a school was established, and a teacher supplied and paid by the board.

At first small fees were charged, but fees were abandoned in 1864.

In 1876, the Government undertook the entire management and control of the Schools, the Attorney-General was appointed Minister of Education, and since that time the Schools have increased at a remarkable rate. There are 425 State Schools, with 46,262 children on the rolls, and 1,161 teachers employed. About one-seventh of the population of the colony is under school instruction.

Every classified teacher is a civil servant appointed, transferred or promoted only by the Governor in Council.

Educational Exhibit.

Thirty-five State Schools sent exhibits of pupils' work, including Maps, Dictation, Drawing, Ornamental Penmanship, and Needlework, altogether about six hundred specimens, representing the ordinary work of the Schools.

The Departments of Mines and Public Works, Railways, Post and Telegraph, and Public Lands, sent some very fine specimens of Maps, Charts, and Diagrams, relating to their various departments.

Physical Charts and Maps were also sent by private exhibitors.

In addition, the Reading Room in the Exhibition was supplied with files of about sixty newspapers and periodicals.

Western Australia.

This colony embraces nearly one-third of the Australian continent. Its area is over 1,000,000 square miles, with a population of about 35,000, principally located within 100 miles of the sea coast.

It is the only one of the Australian group which is still a "Crown" Colony, that is to say a British dependency, where the officials of the Government, as well as the Governor, are appointed by the British Government.

The chief products are Wool, Timber, Pearls and Pearl Shells, Lead, Copper, etc.

There are seventy-four Government Schools, with 102 teachers and 3,052 pupils, in the colony. The amount contributed by the Government for education in 1884 was about $50,000, and the amount paid by pupils about $7,000.

The Education Act in force contains compulsory clauses, and the Commissioners claim that the standard attendance, if not so high as in Victoria or New Zealand, is already on a level with that of New South Wales, and slightly in advance of Tasmania; and as the country is now making rapid progress in other directions, it is not likely the Government will permit her to fall back in the matter of public education.

There was no exhibit of educational appliances, but an excellent collection of District Maps, Photographs, and Oil and Water Color Paintings.

NEW ZEALAND.

New Zealand lies in the Pacific Ocean to the south-eastward of and at least one thousand miles from Australia. It consists of three islands and several small islets, the total area is about 100,000 square miles, the estimated population in 1885 was 576,234, exclusive of about 40,000 Maories.

Tasman visited New Zealand in 1642 and found it peopled by the Maori race. The next European who visited the country was Capt. Cook, in 1769; the Maories, its aboriginal inhabitants, were at that time cannibals, devoid of religious belief, except confused notions of good and evil demons. Capt. Cook is said to have planted in the country the first germ of colonization. Notwithstanding this, for a number of years New Zealand was only known to the civilized world for the danger of its coasts and ferocity of its inhabitants.

In 1814, the representatives of the English Church Missionary Society became the first European residents. After several years, in which the country became morally contaminated from the influx of traders, run-away sailors and adventurers, the British government interfered, and subsequently, after negotiation with the native chiefs, assumed complete possession of the country.

The constitution was that of Crown Colonies, and the Governor, except in so far as he was controlled by the Imperial Government, was almost despotic.

In 1853, a new constitution, based on the popular principle, came into force.

In 1863, the entire responsibility and control of the country was transferred from the Imperial to the Colonial Government, and the usage of responsible Government is now in full force.

Public schools are free, the cost being defrayed by an annual parliamentary vote. The amount voted for free schools in 1886 was about $17,000. They have 987 public schools, with 97,238 enrolled pupils and 2,447 teachers.

There are also seventy-one native schools for the education of the Maori race, which in 1884 cost the country over $67,000.

Several European schools, also, receive subsidy from the Government for the support of Maori pupils. The total number of Maori children receiving education in 1884 was 2,929. Endowed Secondary Schools, Grammar and High Schools, and Endowed Theological Colleges have also been established in various parts of the Colony. These are for the most part affiliated to the University of New Zealand.

The University of New Zealand is purely an examining body. It is empowered by Royal Charter to confer degrees, but it has no teachers in its employment; the teaching part of the work is done by affiliated institutions.

Educational Exhibit.

The Education Department, Wellington, exhibited a small collection of School Books, Reports and Pamphlets, and a private exhibitor sent some Drawing Books.

Maps were also exhibited by private individuals.

The Otago University sent a magnificent collection of Fish and Reptiles, stuffed and in alcohol, also Skeletons disarticulated and mounted for teaching purposes.

The Canterbury Museum had an excellent exhibit of skeletons of extinct New Zealand Birds, including the Dinornis Maximus, also Maps, Drawings, etc.

FIJI.

The Colony of Fiji is a group of islands in the South Pacific numbering over 200, of which eighty are inhabited. The total area is about 8,000 square miles, with a population of about 110,000, of which about 2,000 are white.

The Fijian Archipelago was discovered by Tasman in 1643. About the year 1804 twenty-seven convicts escaped from New South Wales and settled among the islands. These desperadoes having firearms, were dreaded by the native savages, and might have obtained absolute government of the islands; but they lived only for self-indulgence and the gratification of vile passions, some of them being regarded as monsters even by the ferocious cannibals with whom they associated.

In 1858, King Thakombau offered to cede the sovereignty of the islands to Her Majesty on certain conditions, which were not accepted.

In 1871, Thakombau, with the assistance of some Europeans, formed a government for the whole group, and the first parliament met for the kingdom of Fiji. It was found that the system of government adopted was unsuited to the condition of the country, and the Assembly was dissolved in 1873.

In 1874, Thakombau re-assembled his chiefs, and made another offer of cession with conditions which were unacceptable to the Imperial Government. Sir Hercules Robinson, Governor of New South Wales, was deputed by the House of Lords to proceed to Fiji, and the result of his negotiations was that the king and chiefs made a formal and unconditional cession to Her Majesty of the sovereignty of the islands.

The first Governor of the new dependency was appointed in 1875. Confidence in the government has grown up and these erstwhile savages are now a law-abiding native community.

Both Common and High Schools have been provided for upon a similar basis to that adopted in the Australasian colonies. Common Schools have been established in the islands of Suva and Levuka under certified teachers, assisted by pupil teachers. The Inspector's latest report shows that the attendance is regular and the educational results fairly satisfactory.

For the natives, the Wesleyan Mission have established day schools, at which about 42,000 children receive instruction. They have also a native Industrial School, educating about 100 boys from the northern provinces. The school is under European superintendence, assisted by Fijian tutors. In addition to scholastic subjects, instruction is given in agriculture, carpentering, boat-building, etc.

Educational Exhibit.

The native Industrial School exhibited a number of carpenters' tools, etc., manufactured by the pupils.

The Rev. James Culvert sent a collection of Books in the Fijian language, Illustrated Sacred Cards, Polynesian Gazette, printed on native cloth, etc., and several private individuals exhibited Photographs, Paintings, etc.

CAPE OF GOOD HOPE.

This is the most important British colony in South Africa. Its total area, formerly only about 120,000 square miles of territory, is now about 226,000 square miles, with a population of 340,000 whites and 900,000 colored.

This headland was discovered by Bartholomew Diaz, a Portuguese navigator, in 1846, but no permanent settlement at the Cape was effected by the Portuguese. It was used for the next century and a-half as a port for their ships, and by those of England and Holland as well.

In 1620, a party of Englishmen landed and took possession in the name of James I. but nothing came of this attempt, and it was not until 1652 that the Dutch East India Company took possession of Table Bay.

It was occupied by the English from 1795 to 1803, restored to the Batavian government in the latter year, and re-occupied by the British in 1806, whose possession of the place was ratified by the congress of Vienna in 1815.

It is only within the last seventy years that English colonization has been freely and fairly encouraged in the country. It is now quite prosperous, its exports in 1884 amounting to $35,000,000.

The colony now has 1,603 miles of railway open to traffic, and the total amount expended upon their construction and equipment was $73,000,000. They have also telegraphic lines, and submarine connection with England.

So far back as 1837, the Secretary to the Cape Government wrote a memorandum on the state of its free schools and generally on the state of education in the colony. This gave rise to the appointment of a Superintendent-General of Education, and the establishment of twelve principal schools.

In 1839, primary free schools, and secondary schools with a fee of $20 per annum were established. The teachers were paid by the government. Other schools were added about the same time to provide for the poorer children, chiefly of the colored race.

From that time the Government has been very liberal in aiding by grants from the Treasury, the establishment of schools throughout the colony. At the present time the Government co-operates with each section of the community in promoting education by means of grants in aid from the public revenue. The provisions of the higher and elementary education acts include grants in aid of Universities, the half salaries of teachers in the three grades of Public Schools, the half salaries of superintendents and teachers of District Boarding Schools. Capitation allowances towards the maintenance of indigent scholars, aid towards the salaries of teachers of District Mission Schools, and towards the salaries of teachers of Day Schools among the aborigines and native tribes. Capitation allowances to native apprentices and boys and girls in industrial institutions; assistance in equipping schools with furniture, books, maps, blackboards, scientific apparatus, etc.; also tools for native workshops, and sewing materials where needle-work is taught; aid for training elementary teachers, and aid for art schools.

In 1884 the colony had 1,004 schools of various classes, with 78,037 pupils; there was also five colleges, with 315 students in the University of the Cape of Good Hope which is an examining body.

The amount expended for education in 1884 was about $1,000,000, one-half being paid by the Government and the other half by local efforts.

The annual cost for instruction per pupil is $15.30; the fees vary from thirty-five cents to eighty cents per month in the country districts, but are much higher in the principal towns.

Educational Exhibit.

There was no exhibit from the Public Schools.

The Art School, Cape Town, sent pupils' work, consisting of Freehand Drawings, Machine Drawings, Building Construction, Sepia Paintings from casts, etc.

The Art School, Grahams' Town, contributed a good collection of Outline and Shading from the round, Oil and Water Color Paintings, etc.

The Art School, Port Elizabeth, sent Freehand Drawings from nature, Geometrical Drawings, Machine Drawings, Isometrical Projections, Building Construction, Drawings from casts, Oil and Water Color Paintings, etc.

The Art School, Witenhage, exhibited Machine Drawings, etc.

In addition, there were excellent Drawings and Designs for Buildings, Maps and Diagrams, Paintings, etc., from private exhibitors.

NATAL.

This colony is situated on the eastern side of South Africa, 800 miles beyond the Cape of Good Hope and facing the Indian Ocean, its area is 24,000 square miles; the total population is 423,000, including 35,000 Europeans, 27,000 Indian coolies and 361,000 Zulu-Kafirs.

Natal was first occupied as a British possession in 1843. Sugar is grown along the coast; it was introduced in 1851, and at the present time they have about 29,000 acres with an annual produce of about 18,000 tons; tea and tobacco are also grown in large quantities; coal is found in great abundance; it has been calculated that the coal fields of the Klip River county will yield over 2,000,000,000 tons.

There are 173 miles of railroad in operation, owned and worked by the Colonial Government.

Provision has been made for a system of education for the colony and the maintenance of Government Public Schools. These Schools are under the control of the Council of Education, consisting of twelve members, five of whom are ex-officio members of the Executive Council; the remainder are nominated by the Governor in Council. There is also connected with this Department a Superintendent of Education.

For Elementary Education there are four Model Primary and seven Primary Schools, distributed through the chief towns.

These Schools have an annual examination, on which depends capitation grants, payable to the teachers, as an incentive to good work, over and above their fixed salaries. There are also about forty Private Schools in receipt of Government grants, and subject to Government supervision.

For higher education there are two High Schools. Three Bursaries, each $200, to the High Schools, for three years, are open each year to competition among boys in the colony. There is also an exhibition of $750 per annum, tenable for four years, given annually, the holders to proceed to the United Kingdom for the term of the exhibition.

The amount voted by the Legislative Council for education in 1885, was $135,000. The fees paid by the pupils attending the Government Schools in 1885, amounted to about $16,000, which is paid into the treasury as general revenue.

The fees at the Primary Schools range from twenty-five cents to one dollar per month, and these are remitted when occasion is shown. During the past year 607 pupils received free education at these Schools.

Educational Exhibit.

The Council of Education exhibited illustrations of the Educational System in Natal. There was also an excellent Map of Natal, showing the positions of European Schools, and several Photographs of Primary and High Schools.

The Scotch Mission Training School at Pietermaritzburg exhibited a collection of pupils' work, done by native children, Desk, Work-box, etc.

Industrial, Agricultural, Geological, Meterological, and other Maps and Charts, were also exhibited by the colony.

ST. HELENA.

This small dependency of the British Empire is 1,200 miles from the nearest point of the African mainland. The whole Island is a huge mass of rock of volcanic origin, varying from 1,500 feet to 2,700 feet above the sea. The total area is about forty-five square miles. Population in 1881, 5,059.

This Island was discovered by the Portuguese in 1502, but was abandoned by that nation in 1600. It then became a bone of contention between the Dutch and English, and was captured by Sir Richard Munden in 1673. It was then granted by charter to the English East India Company, who retained it until 1836, and subsequently transferred it to the Crown for $500,000.

The chief historical interest attaching to St. Helena is derived from the fact that it was the scene of the captivity of the Emperor Napoleon during the last six years of his life, from 1815 to 1821. He died there in 1821, and his body was moved to Paris in 1840.

This Island was formerly well known as a port for homeward bound East Indiamen, but has lost much of its commercial importance since the opening of the Suez Canal. In addition to the loss from the falling off in the visits of shipping, a terrible destruction was caused in 1840, through the introduction of the white ant in some Brazilian timber, out of a broken-up slaver, which inflicted a loss upon the colony of $350,000.

James Town, the seat of Government, has a population of 2,500.

The Commissioners say, in their report, that the great drawback to the prosperity of the Island is, doubtless, the want of efficient and organized labor. The "native," whose wants are easily supplied by a meal of fish and rice, is of a naturally indolent disposition, and not alive to the necessity of working for his daily bread.

There was no School Exhibit from St. Helena, but a large collection of Photographs, Maps, Plans, Water Color Paintings, was contributed by different exhibitors.

ASCENSION.

This small Island is 760 miles from St. Helena, and 900 miles from the west coast of Africa. Its area is thirty-eight square miles, with a population of about 200.

It was discovered by Gallego, a Portuguese, in 1501. It was garrisoned in 1815, by a detachment from St. Helena, and subsequently by a company of marines. During the period of the suppression of the slave trade, it was the head-quarters of the South African Squadron, and stores, barracks, batteries, etc., were built.

Georgetown, the only station, has a fort to protect the town. It is entirely under the admiralty, the Governor being a Captain of the Royal Navy.

The Island is visited by the sea turtles from Christmas to Midsummer, to deposit their eggs in the sand ; as many as fifty or sixty are frequently turned of a night, and then removed to ponds or tanks in the town. They weigh from 600 to 800 pounds, and are sold to the shipping for $12.50 each.

The climate is said to be the driest and most salubrious in the world.

There was no Educational Exhibit from this Island, but they exhibited Views and Photographs, and an Admiralty Chart.

TRISTAN D'ACUNHA GROUP.

This group of islands is in the South Atlantic, 1,300 miles from the Cape of Good Hope.

Tristan D'Acunha, like the other Atlantic islands, is of volcanic origin. It was discovered by D'Acunha, a Portuguese, in 1506 ; it is of circular ontline, in the shape of a truncated cone, rising to the height of 7,640 feet above the sea, with an extinct crater at the summit of the mountain. The diameter is about seven miles.

The Island was occupied by a detachment of artillery during the captivity of Napoleon, at St. Helena, and on their withdrawal in 1821, an artilleryman, two seamen, and four whalingmen, remained behind, and became the founders of the present settlement.

In 1867, H.R.H. the Duke of Edinburgh, when Captain of the *Galatea*, visited this Island, and conferred the name of Edinburgh on the settlement.

The population of the colony in 1883 was ninety-three, but this small community sustained a severe loss last year, no less than fifteen brave men losing their lives while endeavoring to assist a ship in distress.

Photographic Views and Charts were exhibited from this Island.

INACCESSIBLE ISLAND.

This Island, which is a great resort for sea-birds, is a high mass of rock, with a table summit nearly square, with sides a mile in length. The highest point is 1,840 feet above the sea.

The outward bound Indiaman, *Blenden Hall*, was wrecked here in 1821, and the crew and passengers rescued and taken to Tristan D'Acunha. Two German officers were also wrecked in 1871, and suffered great hardships until taken off by H. M. S. *Challenger*, in 1873.

The exhibit from this Island consisted of specimens of rocks.

NIGHTINGALE ISLANDS.

A group of three islands. The largest is one mile long and three-quarters of a mile wide, with two peaks, which rise about 1,000 feet above the sea.

The smaller islets, Stoltenhoff and Middle Isle, are large rocks about half a mile in length, 325 and 150 feet in height. A zone of kelp extends a quarter of a mile from the east side of the islands ; they are visited by seals and sea-elephants in large numbers.

Specimens of rock from these islands were exhibited.

CEYLON.

The Island of Ceylon is situated south-east of the southern extremity of Hindustan. Its area is about 25,364 square miles, with a population of nearly 3,000,000, but the proportion of Europeans to natives is less than two per 1,000. About 1,700,000 of the population are Buddhists.

This Island is of great historic interest. Sir E. Tennant, formerly Lieut-Governor and Colonial Secretary, says : "There is no island in the world, Great Britain itself not excepted, that has attracted the attention of authors in so many distant ages, and so many different countries, as Ceylon ; there is no nation in ancient or modern times possessed of a language or literature the writers of which have not at some time made it their theme."

In the centre of the Island are found the ruins of Pollonnaruwa and Anurádhapura, the latter was the chosen capital of King Panduk Abhaya, 437, B.C., and remained the capital for twelve centuries. Historians write that the outer wall of this city enclosed 250 square miles, and was completed in the first century of the Christian era.

It still contains interesting records in stone and the sacred Bô tree. Major Forbes, in his "Eleven years in Ceylon," states than in the reign of King Devànampiya Tissa, 307, B. C., Anurádhapura received the collar-bone of the Gautama Buddha, his begging-dish filled with relics and a branch of the Bô tree, under which he attained Buddahood."

This relic of 2,200 years ago still flourishes, and is believed to be the oldest living tree of which there is any authentic record. It is held sacred throughout the Buddhist world, and is the goal of many a long pilgrimage. Even the fallen leaves are treasured by the pilgrims, and carried to distant lands.

The Portuguese were the first European settlers in Ceylon. From early in the 16th to the middle of the 17th centuries they held continuous possession. From 1656 to 1796 the Dutch governed the maritime provinces of the Island, the Central or Kandyan provinces remaining under their native rules. In 1796 the last remaining stronghold of the Dutch at Colombo capitulated to the English, and the Island became part of the British possessions in the eastern seas.

Colombo is now the capital, with a population of nearly 120,000.

Ceylon is celebrated for its plumbago ; upwards of 240,000 persons are employed in mining and shipping plumbago. In 1882 upwards of 240,000 cwt. were exported. Over one-half of this quantity raised is exported to the United States for the manufacture of pencils, crucibles, etc.*

The manufacture of salt is a Government monopoly, and produces a profit, from $400,000 to $500,000 per annum.

The pearl fishing, though uncertain, is still, in favorable years, a valuable addition to the revenue. The same primitive system of gathering the oysters exists as in ancient times ; every oyster is gathered by the hand of the diver, no dredger or implement is allowed to be used. The Government take as royalty two-thirds of the oysters thus gathered, which are sold by auction at the close of each days fishing. In the last successful fishery, the Government share realized about $300,000.

At present the most important industry is planting coffee in the hill districts. In 1874-5 the export of coffee was valued at $25,000,000. Tea is also largely cultivated. Although the Singhalese are mainly an agricultural race employed in tilling the soil, their exhibits of agricultural implements were of a very primitive style. The Singhalese plough of to day is a counterpart of the implement used two thousand years ago.

Educational Exhibit.

The Department of Education exhibited Singhalese Maps of Ceylon, Europe and Asia, prepared for vernacular schools. The Department also publish books for the English, Anglo-Vernacular and Vernacular Schools.

A large number of Buddhist old books were exhibited. These are composed of leaves of a palm tree; the writing is effected with an iron stylus, and the leaf washed over with an equivalent for ink, which, when the rest of the leaf is cleaned, remains on the letters. The whole of the leaves are then pierced and strung together and bound with a board on each side.

The Government of Ceylon sent a series of large Kandyan Paintings, which were used as a frieze round the walls of the Court.

Private exhibitors also sent Paintings, Photographs, Botanical Drawings, etc.

*The Canadian Plumbago and its products, as exhibited at the Colonial Exposition, took the highest awards at the Philadelphia and Paris Exhibitions for pencils and crucibles, and it is to be hoped that this important trade will soon be in the hands of Canadians.

MAURITIUS.

Mauritius, or Isle of France, is a beautiful and fertile island situated on the Indian Ocean. It is the largest British possession in the African seas. Its area, including the dependencies of Rodrigues, Seychelles, Amirante Isles, Chagos, etc., is about 708 square miles, with a population of about 360,000.

The island was taken by the British from the French in 1810. The greater part of the population consists of colored races, chiefly Hindu. They are largely engaged in the culture of coffee, sugar-cane, rice, etc.

Port Louis is the capital, with a population of about 70,000.

It consists of alternate hills and valleys, the highest point being nearly 3,000 feet above the sea.

The Executive Committee sent a large collection of Maps, Photography, Botanical Specimens, etc., but there was no educational exhibit.

SEYCHELLES.

The Seychelles or Mahe Archipelago, consists of 30 small isles with a population of about 7,000. These islands are situated to the north of Mauritius on the Indian Ocean.

Originally discovered by the Portuguese, they were, after occupation by the French, ceded to England in 1814, and now form one of Her Majesty possessions. Although little known to fame, they are said to be abundant in fertility and natural beauty.

The exhibit consisted chiefly of sketches of fruits, flowers and other objects, and a variety of natural history specimens.

STRAITS SETTLEMENTS AND PROTECTED MALAY STATES.

Straits Settlements.

The Colony of the Straits Settlement, as defined by letters patent under the Great Seal of the United Kingdom, dated the 17th of June, 1885, consists of the Island of Singapore, the Town and Province of Malacca, the Territory and Islands of Dindings, the Islands of Penang, Province Wellesley, and their dependencies.

Singapore is situated at the extremity of the Malay Peninsula, and it contains an area of 206 square miles. It is the most important commercial station of this region. The town of Singapore, with a population of 139,200, is now the seat of government.

Malacca is the largest as well as the oldest of the Straits Settlement. It has an area of 659 square miles. The town of Malacca has about 5,000 inhabitants. Malacca was ceded to England by a treaty with Holland in 1824, in exchange for Bencoolen, in Sumatra, with an agreement that England would not form any settlements in Sumatra, nor the Netherlands in the Malay Peninsula.

The *Dindings* were ceded to the Colony by Treaty in 1874. The total area of these islands is about 200 square miles.

Penang was ceded to England in 1785 by the Rajah of Kedah,—it was the seat of Government of the Straits Settlement until 1832. The total area is 10,759 miles.

Wellesley was ceded to England by the Rajah in 1800, in order to enable the authorities to put down the prevailing piracy which played havoc amongst the European merchantmen. Its area is 207 square miles.

The total population of the settlements in 1881, was 423,834, the proportion of Europeans was about 3,000, natives of India 12,000, and the remainder Malay and Chinese, about equally divided.

British intercourse has extended with this region for over 300 years. It was formerly in the possession of the Dutch, and subsequently from 1827 to 1867 was an Indian dependency. It was then transferred by Act of Parliament to the Colonial Office.

It is a Crown Colony. The Council is administered by a Governor appointed by the Crown for a term of six years.

There are English teaching schools in the settlements, some supported by Government, others by endowments and voluntary contributions.

In Singapore they have eight English teaching schools, and a special school for Chinese boys. In Penang there are ten English teaching schools, and in Malacca five schools.

The attendance at these schools in 1884 was 4,098 ; the fees paid by pupils varying from 25 cents to one dollar per month.

Malay vernacular education is provided throughout the Colony in schools supported from the public revenue, with the exception of a small fee of 4 cents per month for each pupil.

Protected States.

In 1874, the three Native States, Perak, Selangor and Shujai Ujong, were taken under protection by Great Britain. They are governed by their native rulers, acting with the advice and assistance of an officer styled the British President, who is appointed by Her Majesty's Government, and is directly subject to the Governor of the Straits Settlements. Each state has its staff of European and native officers.

Perak has an area of 7,949 square miles, with a population of 118,000 persons.

Selangor occupies an area of about 3,000 square miles. The population amounts to 46,568 persons.

Shujai Ujong has an area of 660 square miles, with a population of about 14,000 persons.

Educational Exhibit.

The Free Schools at Penang exhibited Maps drawn by Chinese boys.

Private exhibitors sent Malay-English and English-Malay books, and a large collection of publications printed in Singapore, Albums of Scenery, Photographs, etc.

The Ethnological department was fully represented by Models of Chinese Temples, and other buildings, Native Craft, Implements, etc., also a collection illustrating the daily life of the inhabitants of the Cocos, or Kieling Islands.

HONG KONG.

The Island of Hong Kong is separated from the mainland of China by Victoria Harbour, Ly-se-moon pass, and Tathong Channel. It has a circumference of 27 miles and an area of 30 square miles, with a population of about 160,000, of which 130,000 are Chinese.

It was ceded to Great Britain, together with the Harbour and Islets in January, 1841, and the cession was confirmed by the Treaty of Nanking, in August, 1842. Hong Kong and its dependencies were erected into "the Colony of Hong Kong" by Letters-patent bearing date the 5th April, 1843.

The administration of the Colonies is at present in the hands of the Governor, with an Executive Council of six official members and a Legislative Council of six official and five unofficial members.

The chief town and centre of the Colonial Government is Victoria, situated on the north side of the island. It has a magnificent harbour of 4 miles long and from 2 to 3 miles wide, of sufficient depth for the largest vessels. There is excellent dock accommodation for the largest ships.

Hong Kong is in constant connection by means of steamers, with Europe, America and Australia, also with India and the coast ports.

The Government supports a Central School, the building for which being inadequate for its wants, will shortly be replaced by a new building now in course of erection, to be called Victoria College. In addition they have the Hong Kong Public School or St

Paul's College, under the direction of the Bishop of the Colony and a co m
Joseph's College, under the direction of the Bishop of Acantho and the Christian Brethren. There are also schools supported by different missionary bodies, including mission vernacular schools for girls. In addition there are French, Italian and Spanish Convents.

Educational Exhibit.

The Inspector of schools in Hong Kong sent an exhibit consisting of educational books, photographs of students at work, school materials, and models of desks, chairs, etc., used by the pupils.

The Italian Convent and the French Convent, each exhibited collections of needlework done by Chinese children. Private exhibitors sent maps, photographs, etc., and there was a great variety of models illustrating the manners and customs of the people.

BRITISH NORTH BORNEO.

This is one of the latest additions to the large number of British Colonies distributed throughout the globe.

The territory of British North Borneo includes the whole northern portion of the great Island of Borneo, situated in the region of the Malay or East Indian Archipelago. The area of British North Borneo, including some small isles, is 31,000 square miles.

It was founded by the North Borneo Company, under a Royal Charter, bearing date the 1st November, 1881. The cession of territory by the Sultans of Brunei and Sulu, on conditions of the payment of an annual tribute, took place in December, 1877, and January, 1878. This company secured, as it is by a Royal Charter, has its possessions, which are now a part of the British Empire, protected by the British flag from all aggression or encroachment on the part of any alien or foreign power.

The Government is administered by a Governor, assisted by a Council and by a Colonial Secretary and President, and the mode of Government of a British Crown Colony is adhered to as far as practicable.

The greater portion of British North Borneo is covered with dense forests, containing trees up to ten feet in diameter and of great height, many of them being over 100 feet to the first branch. There are about 78 known kinds of forest trees ; some of these are very valuable. The woods are used for furniture, house building, engineering, etc.; one variety, Billian, is in great demand in China and the Straits Settlements, for wharf piles, etc., as its specific gravity is so great that it sinks in water and is very hard and durable, and perfectly proof against the 'Teredo' or sea worm.

It is quite probable that the immense trade now done in the exports of the woods of North America to China and Australia, may be diverted to British North Borneo, as these countries are only about 1,100 miles distant.

As the European population is very small, provision has not yet been made for education in this settlement.

The exhibit consisted chiefly of natural products, including woods, rattans, gutta percha, india rubber, vegetable tallow, gum, gold, coal, etc.

BRITISH GUIANA.

This Colony is situated in the north-east of South America ; its area is computed at 76,000 square miles.

The first colonists were the Dutch, who settled on the Pomeron Coast in 1580. In 1781 the British captured all the possessions of Holland in South America. They were subsequently surrendered to the French, regained by the Dutch, who in 1796 yielded them to the British, in whose hands they have remained, with the exception of a brief period in 1802-3, up to the present time.

The population of British Guiana in 1885 was about 270,000, exclusive of 900 troops in garrison and seamen in the forts.

The Aboriginal Indians are scattered through the interior. The only dress an Indian usually wears is a strip of cotton bound tightly round their loins and secured by a cord tied round the waist, with a string of beads round his neck, and a crown made of bright feathers. The women are as scantily attired as the men, but wear more ornaments. Some of these Indians work upon the timber grants, but they are chiefly occupied in fishing, hunting, etc. They are clever in constructing boats and canoes, specimens of which were to be seen at the exhibition.

Georgetown is the metropolis and chief port of British Guiana. It has beautiful public buildings, law courts, Catholic cathedral, hospital, market, etc.; it is also supplied with gas, waterworks, tramways, and a railway. There are two newspapers published daily. There is also a Portuguese paper.

The Colony is divided into eighteen parishes, under the charge of the clergy of the Church of England or Church of Scotland. The total expenditure of the Colony in 1885, on account of the clergy and missionaries was over $100,000.

About $125,000 was expended for education. There are 177 schools receiving Government aid, including Church of England, Church of Scotland, Church of Rome, Wesleyan London Missionary, Congregational and Estate Schools. The principal school is Queen's College, which is a Government institution.

There was no Educational Exhibit from this Colony, but private exhibitors sent a collection of maps, photographs, and water-color paintings. In addition the Commissioner had a very interesting Ethnological collection, consisting of weapons and other articles in use among the native Indians.

WEST INDIES.

The numerous islands of this region are embraced under three divisions—the Greater Antilles, the Lesser Antilles, or Windward and Leeward Islands, and the Bahama Islands.

Combined the West Indies represent an area of 100,000 square miles, inhabited by 1,500,000 British subjects.

In order to illustrate as thoroughly as possible the history of the colonies discovered by Columbus, in 1492, a number of pictures, historical relics, books and engravings, were exhibited on the West Indian gallery. In this collection we notice a series of oil paintings of the Kings and Queens of England who are connected with the history of the West Indies; also ancient portraits of Columbus, and the Diego Ribero Map, loaned by the S. Congregation of Propaganda Fidei, Rome, by permission of His Holiness, Pope Leo XIV. This map was executed by Diego Ribero in 1529, and is reported to be the earliest complete map of the world in existence. It measures 7 feet by 3 feet, and is on parchment.

Jamaica.

This island was discovered by Columbus in 1494. It was under Spanish rule until conquered by the English during the administration of Oliver Cromwell.

The total area of Jamaica is about 4,200 square miles, and the population, according to the last census, was 580,000. Of these are whites, 14,432; colored, 109,946; blacks, 444,186, the remainder being Coolies and Chinese.

Jamaica is divided into three counties; Surrey to the east, Middlesex in the centre, and Cornwall to the west, The eastern part is mountainous, a range known as the Blue Mountains, varying in height from 5,000 to 6,000 feet above the level of the sea, traversing from east to west. The coasts contain numerous safe and excellent harbors, over thirty of which are capable of affording shelter to the largest vessels. The finest is Port Royal, or Kingston Harbor, 6 miles long by 2 miles wide.

The principal towns are Kingston, with a population of 40,000 inhabitants, and Spanish Town, the seat of Government, population about 8,000.

Prince William, Duke of Clarence, visited Jamaica in 1782, and was the first member of the Royal Family who ever landed on its shores. Since then H. R. H. Prince Alfred, Duke of Edinburgh, was entertained in 1861, and the two sons of the Prince of Wales in 1880.

The most remarkable event that has happened during the present century in connection with this island is the emancipation of slaves in 1833.

There was no Educational Exhibit from Jamaica, and the only exhibits of an educational character were photographs of public buildings by the Jamaica Institute; etchings, etc., from the Women's Self Help Society; and books and natural history specimens from private contributors.

Trinidad.

Trinidad, discovered by Columbus in 1496, is the largest of the islands in the Caribbean Sea known as the Lesser Antilles. The total area of the island is 1,754 square miles; population by last census, (1851) was 153,128.

Settled by the Spanish in 1588, Trinidad has been the scene of sanguinary conflict between them and the French, and the latter and the English, finally resting with the English in 1797.

Colonel (afterwards the famous Sir Thomas) Picton, was appointed the first English Governor. Trinidad was finally ceded to Great Britain by the Treaty of Amiens, but not without great opposition on the part of Napoleon, then First Consul, who supposed from its geographical position, it would command the trade of the great rivers of South America.

During the first five years after its capture, over $1,000,000 worth of articles of British manufacture were sold annually by the merchants of Trinidad to the traders from Venezuela, and a far larger trade was carried on clandestinely, as is proved by the fact that Colonel Picton reported to the Secretary of State that Spanish launches annually carried away articles of British manufacture to the value of $8,000,000; subsequently, however, Trinidad was fated to be looked upon by British statesmen merely as a sugar-producing colony.

Although the colony has always been immediately under the Crown, the Commissioner states that remnants of the old Spanish law still remain; names of places and estates are Spanish still, the leading residents bear French and Spanish names, and the society of the capital includes a complete French circle even now.

The capital is Port of Spain, with a population of 32,000. Trinidad has also the Port of San Fernando, which is connected by a railway recently completed by the Government.

Photograph views of public buildings, etc., were exhibited, also oil and water-color paintings, and a collection of 235 specimens of woods with English, French, Spanish and scientific names attached.

Barbados.

Barbados is the most windward of the Caribbean Islands; its total area is 166 square miles, with a total population of 171,860—whites, 16,054; coloured, 155,806.

First owned by the Portugese at an unknown date; it was named by them "Los Barbados," from the number of bearded fig-trees or banyans which were found growing there.

This is one of the oldest British colonies; in the year 1605 the "Olive," an English vessel, touched at the island and landed some men, who inscribed on a tree "James, King of England, and of this island."

James I. made a grant of this island to the Earl of Marlborough, and the first English Governor was appointed in 1625. The island has never been severed from England. The principal town and port is Bridgetown, with about 21,000 inhabitants.

The chief product of the island is sugar. At first the sugar-cane was only cultivated for the purpose of brewing a refreshing drink. In 1640 a Dutchman from Brazil taught

the science of allowing the cane to ripen and of boiling the juice. At the same time the planters learnt to distil rum, called at first "kill-devil."

Out of 106,470 acres, an area of 100,000 acres is now devoted to canes, the remainder being taken up with roads, buildings, etc.

The colony may now be described as possessing representative institutions, but the Crown has a veto on legislature, and retains the appointment and control of public officers. The Government consists of a Governor, Executive Council, and a Legislative Council, appointed by the Queen, and a House of Assembly having twenty-four members elected annually on the basis of a very low franchise.

There is a large number of Elementary Schools on the island, supported by school fees and Government aid. Also many Higher schools, endowed and aided by the State, all of the Church of England. There are also Moravian and Wesleyan schools. The Codrington College, founded in the year 1710, is connected with the University of Durham, and its students are eligible for all the degrees.

Barbados is the only place in the West Indies where a university education can be obtained.

Some paintings and photographs were exhibited, but no educational appliances.

THE WINDWARD ISLANDS.

The Windward Islands includes the islands of Grenada, St. Lucia, St. Vincent, and Tobago, containing an aggregate of 622 square miles. They are presided over by a Governor, or Chief, who resides in Grenada, the seat of Government, the other islands having a resident Administrator. Each island has its separate legislature, laws, and tariff.

Grenada.

This island is situated in the Caribbean Sea. It was discovered by Columbus in 1498, and was inhabited by a people of war-like habits called Caribs. It is about 21 miles in length, and 12 in breadth, with a population of 46,425. In 1650 the Island was taken possession of by Du Parquet, a Frenchman, who eventually got rid of the natives; after several battles their extermination was effected by driving the last remnant of the Caribs, about fifty, into the sea. The place from which they threw themselves into the sea was called *Le Morne des Sauteurs* (the Hole of the Leapers), a name it has retained to the present day. Du Parquet transferred possession of the island to the Count de Cerillac, in 1656, for 30,000 crowns. Subsequently it was sold to the French West Indian Company, whose charter being abolished in 1674, it became vested in the Crown of France.

In 1762 Grenada surrendered on capitulation to Great Britain, and was ceded to that power by the Treaty of Paris in 1763. It was recaptured by the French in 1799, and restored to the British Government at the general pacification in 1783.

The present form of local Government in Grenada is that known as the Crown Colony system. The Governor, who is appointed by the Queen, is Governor-in-Chief of the other islands composing the Windward Group.

The chief produce of the island is cocoa.

The principal town is St. George, with a population of about 4,000. It was originally built by the French, who named it Port Royal. It has a large bay, which is estimated to be able to afford shelter to 1,000 ships of 400 tons each.

Education was formerly much neglected, but of late years they have a good system of Elementary schools, which is working with satisfaction. In 1885 a Grammar School was established by some private persons which has since been endowed by the Government, and is said to promise great results.

There was no educational exhibit from Grenada.

St. Vincent.

St. Vincent is the most English of the group of the Windward Islands; it has an area of about 140 square miles. The capital of the island is Kingstown, with about 6,000 inhabitants.

St. Vincent was not finally conferred to England till 1795. In the early part of the 18th century the French and English began to treat it as neutral, both disliking, more or less, the task of dealing with the Caribs. It is one of the two remaining islands, the other being Dominica, where the last traces of the Caribs, or old savages of the West Indies, remain. There are 192 Caribs and half Caribs in St. Vincent; they are now a well-behaved race, their old character for ferocity and treachery having been tamed down by the march of civilization.

St. Vincent formerly exported coffee, cocoa, indigo, and tobacco, but the cultivation of sugar gradually superseded that of other products.

St. Vincent is celebrated for its arrowroot.

There was no school exhibit, but excellent models and ethnographical collections representative of the island were exhibited.

Tobago.

Tobago is situated about 75 miles from Grenada, and 20 miles from Trinidad. Its total area is 114 square miles.

Tobago was visited by British navigators in 1580, when the English flag was first planted on the island; it was then uninhabited. In 1625 some Englishmen from Barbados attempted to form a settlement, but most of them were killed by the Indians who then occupied the island. The history of this island has been a very eventful one.

It has been on different occasions a possession of the Dutch, French, and English, and several sanguinary battles have taken place for its conquest. Eventually it fell into the hands of the English, and by the Treaty of Paris in 1762 was surrendered to England. In 1764 it became a legally constituted colony, and the first Lieut.-Governor was appointed.

In 1778 an armament was fitted out by the American States, then in their early days of independence, having for its object the conquest of Tobago. A short engagement ensued, in which the British were successful.

In 1781 Tobago was conquered by the French; in 1793 it was re-taken by the British. By the Treaty of Amiens in 1802 it was surrendered to the French. In 1803 war having broken out again between Engiand and France, Tobago became once more a bone of contention. A British naval and military force invaded the island, and the French Governor capitulated on condition that his garrison should be allowed to return to France. From this period Tobago has remained in the indisputed possession of the English, having been ceded to Great Britain in 1814 by the Treaty of Paris.

Tobago has made very little progress, and the population has not increased 4,000 during thirty years.

They depend upon one mail a month for communication with the outside world, and have no cable connection with other countries. Out of 73,313 acres which it contains, only about 10,000 are under cultivation; some of the best land in the colony is allowed to lie unproductive for the want of roads to the interior of the island.

They had no Educational Exhibit.

St. Lucia.

St. Lucia, twenty-five miles to the north-east of St. Vincent, has a total area of 243 square miles, with a population of over 40,000. The island is almost entirely covered with high mountains, among which is the Souffriére, a volcano in occasional activity.

The first attempt at colonization was by some English settlers in 1639; in the following year the Caribs massacred many of them and drove the rest away. The French next took possession of the island; in 1663 it was captured by the British and was ceded to the French in 1667.

At the Peace of Paris, in 1763, the Earl of Chatham, by the advice of Admiral Rodney, refused to cede it to France, and on the renewal of hostilities, it was one of the first points of attack, and fell once more to Great Britain, but was restored to France at the Peace of Versailles. In 1803 it was again re-taken by Great Britain, and since that time has continued under British rule.

The chief staple of the island is sugar, but attention is now being turned to the cultivation of cocoa, tobaccos and spices.

The capital is Castries, with about 4,550 inhabitants.

They have fifteen elementary schools distributed among the ten towns and villages of the island. These schools are of two classes ; those managed by the Roman Catholics and those managed by the Trustees of the Mico Charity, which are undenominational : they each have about the same number of pupils.

The Convents in Castries and Soufriére have excellent schools for over 700 girls.

There was no educational exhibit from St. Lucia.

THE LEEWARD ISLANDS.

The Leeward Islands are the most northerly of the groups which constitute the Lesser Antilles.

Politically, they are a federation, that is to say, an aggregation of independent governments and legislatures, which, for certain purposes, have delegated their powers to one central and partially supreme government.

Antigua.

Antigua has an area of 108 square miles ; the population in 1881 was 34,964.

This island was discovered by Columbus in 1493. It was at various times in the possession of the Spanish, French and British, whose settlers were exposed to frequent attacks from the Caribs.

Antigua is the seat of the general government of the Leeward Islands. It has a local government administered by the Governor of the Leeward Islands, assisted by an Executive council, and a legislature composed of twenty-four members, twelve of whom are nominees of the Crown, and twelve are elected by the people.

The capital is St. John's.

The chief product is sugar ; it is said that the introduction of the steam plough has conferred advantages that cannot be over-estimated, as by its use lands which have long lain waste are being re-claimed and brought into cultivation.

Educational Exhibit.

Pupils' work from Cedar Hall Moravian School. Samples of Needlework from Lebanon Moravian School, Map of West Indies, collection of Books, old Antigua Newspapers, etc.

St. Christopher and Nevis.

This presidency is composed of two islands, divided by a strait from two to three miles wide.

Nevis was united to St. Christopher in 1883.

St. Christopher, commonly known as St. Kitts, lies nearly west of Antigua, it has an area of 68 square miles with about 2,000 inhabitants.

This island was discovered by Columbus in 1493 ; it was then densely crowded with Caribs. A settlement was founded in 1623. St. Christopher is believed to be the mother colony of the English and French settlements in the Caribbean Sea.

In 1627 the English and French agreed to divide the island between them. In 1689 the French took entire possession of the island. It was re-taken by the English in 1690,

restored to the French in 1697, again captured by the British in 1702, and finally ceded to the British Crown by the Peace of Utrecht in 1713. Subsequently the island became part of the general government of the Leeward Islands.

The capital is Basseterre, the seat of government, with a population of about 7,500.

There are 18,507 acres of land under cultivation; the chief products are sugar, coffee and cocoa; from 1878 to 1882 they exported 1,114,269 barrels (of 100 pounds) sugar, 2,224,723 gallons of molasses, and 287,284 gallons of rum. They have also three large salt marshes which produce about 14,000 pounds of salt annually.

As there are no harbors in St. Kitts or Nevis, the produce has to be conveyed to the shipping places in cattle waggons and carts drawn by mules and horses.

Nevis lies immediately to the south-east of St. Christopher; its area is about fifty square miles. it formerly had a population of 20,000, which is now reduced to less than 12,000.

It was settled by the English in 1625 and became one of the chief slave markets of the West Indies. The emancipation of the slaves had a most crushing effect on Nevis and caused a complete collapse of credit. It is said that the condition of the laborer was then miserable in the extreme, and his wages scarcely averaged ten cents a day. At the present time, laborers earn sixty-six cents per day. The owners of estates are wealthy, and financially Nevis now ranks amongst the most prosperous of West India Islands. Its principal product is sugar.

It is of historical interest as the place where Lord Nelson was married, and passed many years of his life.

The chief town is Charlestown.

There was no educational exhibit from these islands, but a very fair collection of Pottery, Vases made from wood, Shell work, Bead work, Carib implements, and what was of considerable interest, the Register of St. John's, Nevis, containing a record of the marriage of Horatio Nelson and Mrs. Nisbet, on March 11th, 1787.

Dominica.

This is one of the largest of the West India Islands; it contains 291 square miles. The total population at the census of 1881 was 28,211, of whom 27,204 were natives of the island. There were 309 Caribs, of whom 173 were considered to be actual Caribs by descent, without any admixture of negro blood.

Its mountains are next in height to those of Jamaica, but even to the top they are densely clothed with foliage. It is said that from peak to shore the island is a mass of virgin soil and unopened forest.

Dominica was granted to the Earl of Carlisle in 1627; by the treaty signed at Aix-la-Chapelle in 1748, it was stipulated between the English and French that Dominica should remain neutral. In 1776 it became by conquest a dependency of England. Commissioners were sent out for the purpose of surveying and selling the lands capable of cultivation, and the quantity sold yielded to the British Crown the sum of over $1,500,000.

In 1805 the French landed at Roseau, the principal town, which was accidently set on fire, and the Governor was obliged to capitulate, paying the enemy $60,000 to quit. Since this period the island has not known war.

Only 20,000 acres are under cultivation. There remain at least 140,000 acres available for the cultivation of tropical and sub-tropical plants.

The principal products are sugar, cocoa, lime-juice and fruit. Within the past few years an export trade to New York has been established in oranges, which grow almost wild throughout the island.

Dominica is not in a flourishing condition; its trade is small, finances at a low ebb, and houses and roads in a bad condition.

Although there are forests containing valuable woods for building and other purposes, they are only exported in small quantities.

It has been recommended that Her Majesty's Government assist the colonists in constructing roads through the island, so as to open up the interior for the cultivation of staple products.

There was no school exhibit, but there were collections of Models, ancient Carib Implements, photographs of Scenery, etc.

Montserrat.

This island is situated about twenty-six miles south-east of Antigua, its area is about thirty-five square miles, population 11,000.

It was discovered by Columbus in 1493, and settled by the English in 1632, but the French took it in 1664. It was restored to England in 1668, when it was granted by charter a constitution of its own, with a Legislative Council and House of Assembly. It capitulated to the French in 1782, but was again restored to England in 1784, in whose possession it has since remained.

Under the Federal Act, Montserrat is a Presidency, forming part of the colony of the Leeward Islands. The President is the Resident District Magistrate and a Commissioner of the Supreme Court. The Courts of Queen's Bench and Common Pleas are merged into "The Supreme Court" with its three judges going on circuit, and holding the court alternately in each island two or three times a year.

The island consists of a series of rocky hills, with fertile valleys between. The principal product is sugar, but of late years the growth of lime trees and the manufacture of lime-juice has given Montserrat a better known position in commerce.

The population is rapidly increasing, which is attributed to the salubrity of the climate, and to the government provisions of medical attendance and medicines free for all children of laborers under ten years, and all old persons over sixty.

The Commissioner says: "A very wide system of education has also been granted to the children of laborers since emancipation, embracing one in eight of the population from 1837 to 1856, and one in eleven since the new Acts came into operation, by which grants in aid of education have been made from the public purse, and have reached in some years to five per cent. of the entire revenue. An enquiry into the working of these Acts whereby the cost of education per head has been almost quadrupled, has recently been made by a Government Commissioner, the result being that education has been proved to have advanced under them, but they stand condemned in the matters of expenditure."

The principal town in this island is Plymouth.

There was no educational exhibit.

Virgin Islands.

The Virgin Islands consist of a cluster of rocks to the westward of Porto Rico Those of them which belong to Great Britain are Tortola, Virgin Gorda and Anega d The total area is about fifty square miles, with 5,500 inhabitants.

Tortola has an area of twenty-six square miles, consisting entirely of hills, which rise about 1,600 feet above the sea. Roadtown is the capital of the group.

Virgin Gorda is about ten square miles in extent, chiefly hilly and barren in its eastern part.

Anegada is a low-lying coast island, with an area of about fourteen square miles.

For purposes of administration, the group has for a century belonged to the Leeward Islands, having its own legislature.

In 1867, a fearful hurricane destroyed about two-thirds of the houses, including the churches, school-houses, etc. In 1871, the islands again suffered from a hurricane, but not so severely. These islands are not in a prosperous condition.

There was no school exhibit.

BRITISH HONDURAS.

British Honduras, or Belize, is the only British dependency in the Southern portion of North America. It is bounded on the north by Yucatan, on the east by the Bay of Honduras, on the south by Guatemala, and on the west by a straight line drawn from the

rapids of Gracias a Dios, on the river Sarstoon, to Garbutt's Falls, on the river Belize, and thence northward to the Mexican frontier. Total area, 7,562 square miles.

The coast was discovered by Columbus in 1502. The settlement was originally called Belize. In 1638, some Englishmen were shipwrecked and settled here.

So far back as 1671 it was considered a place of importance, as the Governor of Jamaica reported to the King that, "it increased His Majesty's customs and the national commerce more than any of His Majesty's colonies." This is accounted for by the fact that logwood, which was then its staple product, sold for $500 per ton; it is now sold so low as $10 to $15 per ton.

In 1763, a treaty was entered into with Spain, notwithstanding which several battles took place during the next twenty-five years between the English and Spaniards. In 1798, it became English by right of conquest.

Although one of the older settlements, it is one of the youngest colonies. It was not made a colony until 1862, when a Lieutenant-Governor was appointed, under the Governor in Chief at Jamaica.

In 1879, a Governor was appointed. The form of Government is now that of a Crown colony, in which the Crown has the entire control of legislation, while the administration is carried on by officers under control of the Home Government.

The industries of this colony are wood-cutting, growing and manufacturing sugar, cultivation of coffee, tobacco, fruit, etc. The average export is 3,000,000 feet of mahogany, and 17,000 tons of logwood. The cultivation of fruit for the American market is now carried on in consequence of steam communication having been established with New Orleans. The capital is Belize.

The schools in the colony are generally denominational, established and superintended by the clergy of some religious body. They have one Church of England, one Presbyterian, seven Roman Catholic, thirteen Wesleyan, one Baptist and two private schools.

Teachers are granted certificates according to their merits, and receive Government aid under certain conditions.

There was no educational display, but good collections of natural history specimens, photographs, etc., were exhibited.

THE BAHAMAS.

The Bahamas consist of an aggregation of twenty-nine islands, 661 bays, and 2,387 small islets or reefs, which stretch from the northern coast of St. Domingo, to the eastern coast of Florida, a distance of over 600 miles. The principal island is New Providence, which contains the capital, Nassau, with a population of 13,000, and is twenty-seven miles long and seven miles wide. The other principal islands are:—Grand Bahama, Eleuthera, Andros, Abaco, Long Island, San Salvador, Rum Bay, Imaqua, Exuma, Ragged Island, Crooked Island, Berry Island and Harbor Island.

The population, according to the last statistical report, is 44,000, of whom 11,000 were white, and the remainder descendants of liberated Africans.

The Bahamas were discovered by Columbus in 1492. They were inhabited by a hospitable people of the Caribee tribe who believed in a God—a great spirit—and in a future state of reward and punishment. A few years later the followers of Columbus, who had settled in Hispaniola, needed hands to work their mines, and invented a diabolical plot to induce the natives of the Bahamas to accompany them to Hispaniola. They were told that if they would embark upon the Spanish ship and go with them, ere a day and night were passed they would embrace their departed friends, and dwell with them eternally. About 50,000 natives left the island and died in torment, being overworked, scourged and starved by their ferocious task masters.

In 1512, the Bahamas were visited by Ponce de Leon, who went there in search of the fountain of eternal youth. The islands remained almost uninhabited for nearly a century, although they still continued to be Spanish property, having been bestowed, with the whole of the new world, upon Ferdinand and Isabella by Pope Alexander VI.

In 1578, Queen Elizabeth bestowed on Sir Humphrey Gilbert all lands and countries that he might discover, that were not already taken possession of by some Christian and friendly power. As Spain was not a friendly power, Sir Gilbert annexed these islands. Subsequently, repeated attacks were made by the Spaniards. The first British Governor was appointed in 1670.

The present Government is based on the British constitution. They have a Governor, Executive Council of nine members, a Legislative Council of nine members appointed by the Crown, and a House of Assembly of twenty-nine members.

The principal exports are sponges, turtle, coral and shells.

They are now well supplied with public schools, also an art school, reading-room and library, scientific societies, etc.

In 1861, the census gave 8,506 as able to read and write, out of a total population of 35,287. This is less than twenty-five per cent., but they say it is the reverse now as there is scarcely a child over seven years of age who cannot read or write.

Educational Exhibit.

Carved ornaments from the Nassau School of Art, collection of Natural History, etc.

WEST AFRICAN SETTLEMENTS.

These settlements consist of Sierra Leone and Gambia. By an order in council, 26th January, 1876, they were united into one Government, to be called the West African settlement.

Sierra Leone.

Sierra Leone is a small settlement at the mouth of the Rokelle or Sierra Leone river. It has an area of 468 square miles, with a population of over 37,000, of whom only 129 are white. The climate is very deadly to European residents. It was ceded to Great Britain in 1787 by the native chiefs, and was made a residence for freed slaves from the United States and West Indies. A large island called Sherboro was added to it in 1862, when slavery was abolished.

The settlement also includes the Isles de Los; and by treaty 1876, Her Majesty has the right to collect customs duties along the coast between Sierra Leone and Sherboro.

The government is administered by a Governor and Executive Council, and a Legislative Council of five official and four non-official members.

The principal exports are cocoa-nuts, gums, hides, india rubber, etc.

The principal town and seat of Government is Freetown.

There was no educational exhibit, but the native industries, including embroidered garments, decorative gold and ivory work, etc., showed excellent workmanship, and considerable talent in artistic decoration.

Gambia.

The settlement of Gambia lies 500 miles north of Sierra Leone. It has an area of twenty-one square miles, and population of 14,190.

It was made a British colony in 1588, when Queen Elizabeth granted a patent to some English merchants. The slave trade was extensively carried on until emancipation.

The River Gambia empties into the Atlantic. At the mouth of the river is Bathurst the principal town. There are three other posts or trading stations along the banks of the river, viz., British Combo, Barra, and McCarthy's Island.

This settlement is now under the Government of Sierra Leone.

The trade is chiefly in exporting hides, rice, timber, gold-dust, ivory, etc.

Educational Exhibit.

There was a collection of educational books in the native language, consisting of grammars, catechisms, dictionaries, etc. They also exhibited some leather work ornamented with excellent geometrical designs, carvings in wood, and natural history specimens. Amongst the natural products were the Verach seeds, which are used by the natives as candles, one nut being placed after another in such a manner that the flame is transmitted from seed to seed so as to give an uninterrupted light for a considerable period.

THE GOLD COAST COLONY.

The name Gold Coast is given to that portion of the shores of the Gulf of Guinea between the rivers Asini and Volta. It has a total area of 16,620 square miles, with a population of 520,000.

The Gold Coast has been occupied as a British settlement since 1672, when the Royal African Company was formed, which built several forts along the coast. These forts were transferred to the Crown in 1821.

This was soon followed by the first Ashanti war, and on January 24th, 1824, the Governor, Sir Charles McCarthy, was defeated and slain, and his head carried to Coomassie. This was ended by a victory over the Ashantis near Accra, in 1827.

After this the country was again placed in the hands of a mercantile body, which continued until the second Ashanti war in 1863.

These events were followed by a re-arrangement of possessions between the English and the Dutch, which occasioned so much trouble to the latter power, that, in 1871, Holland abandoned to Great Britain all its rights on the Coast. This convention not being approved of by the King of Ashanti, he invaded the British Protectorate in 1873, and so commenced the third and last Ashanti war. Troops were sent out under Sir Garnet Wolseley, who captured Coomassie on the 4th February, 1874.

After this war the settlements on the Gold Coast and at Lagos were by Charter united under one constitution as the Gold Coast Colony, which continued until the present year, when Lagos has again been formed into a separate colony.

There was no Educational Exhibit, but the general exhibit, consisting of textile fabrics, gold and silver ornaments, etc., of native workmanshlp, showed a considerable knowledge of artistic design. This exhibit included the gold ornaments which were paid by the Ashantis to the British Government as a portion of the indemnity claimed at the close of the war in 1874; also the Golden Fetish Axe, which was sent to the Queen by the King of Ashanti in 1881 as a token of peace and submission.

LAGOS.

Lagos, or Niger Territory, is situated on the Bight of Benin. This colony includes Badagry on the west, and adjoining Dahomey; Lagos Island, lying among Lagoons in the centre; and Palma and Leckie on the east. The population in 1881 was 75,270, (only 94 whites).

Lagos was formerly the headquarters of the slave trade, and was ceded to Great Britain in 1861, by King Docemo, who received a pension of $5,000 per annum until his death, which took place in 1885. At first the settlements of Lagos were formed into a separate Government. In 1866 they were amalgamated with the West African settlements, under the Government of Sierra Leone. In 1874 they were amalgamated with Gold Coast Colony, and in 1886 were separated from the Gold Coast, with a constitution of their own.

The chief exports are palm oil, indigo, ivory, cotton, etc.

Educational Exhibit.

There were no exhibits from schools, but several of the general exhibits were real art examples. A collection of incised and *repousse* brass utensils showed great beauty of design; some ivory tusks were artistically ornamented, and the textile fabrics, including weaving and embroidery, were beautifully ornamented. A collection of photographs was included in their exhibits, also two illuminated Korans and a Mahometan MS., which is a good example of early illuminative art.

MALTA.

Malta is situated in the very centre of the Mediterranean, about 58 miles from Sicily and about 180 from the mainland of Africa. Its area is 95 square miles, with a population of 150,000.

Malta is of great historical interest; the Phœnicians settled here B. C. 1519. It was subsequently under the Carthaginians and Romans, and was granted by the Emperor Charles V., early in the 16th century, to the Order of the Knights of St. John of Jerusalem. The Knights of Malta held possession of this island for more than three centuries, until the final dispersion of the Order.

During the past century the spirit of British industry began to show its power by erecting public works and increasing the productive energy of the colony.

The principal products are cotton, potatoes, corn, fruit, and honey. In its manufactures are three specialties, viz., stone work, lace, and jewellery.

An Art School, recently established in Valetta, the chief town, has been the means of introducing modern designs in lace work, so that this trade has now become a most important branch of manufacture, employing 4,500 women and girls, with a revenue of about $250,000 per annum.

There are 173 public and private schools, colleges and ecclesiastical institutes in Malta. The number of pupils attending the schools show a marked and continual increase. In 1842 there were only 3,833 pupils; in 1881 the number had increased to 12,390, exclusive of adults who attended evening and Sunday School classes.

Educational Exhibit.

The Orphan Schools at Floriana and Cospicua exhibited specimens of inlaying and fret work in wood and ivory. The Sisters of the Good Shepherd sent examples of Maltese lace, point lace, embroideries, etc., and private exhibitors sent specimens of bookbinding and typography, also sacred and secular music.

CYPRUS.

Cyprus is the most easterly island in the Mediterranean; its area is 3,723 square miles, with a population of 186,173, sub-divided as follows:—Greek Church, 137,631; Mohammedan, 45,458; various religions, 3,084.

Cyprus is of great historical antiquity, and is referred to in the Book of Genesis under the name of "Kittim." It was conquered by Thothmes III. of Egypt, about B.C. 1600, and became subject to Assyria B.C. 725. It was annexed to the Roman Empire B.C. 57. It was the birth-place of Barnabas the Apostle, and was ruled by him and St. Paul in the early days of the Christian Church.

In ancient times Cyprus is reported to have had a population of 3,000,000. In 1191 Richard Cœur de Lion, King of England, when on his way to the Holy Land, conquered

the island and sold it to the Knights Templars for a sum equal to $1,600,000. In 1571 Cyprus was conquered by the Turks, and remained a part of the Ottoman Empire until 1877, when it was ceded by the Sultan to Queen Victoria, in consideration of an annual payment equivalent to the surplus revenues which it had yielded to the Ottoman treasury in the preceding five years. Consequently the island of Cyprus is burdened annually with a payment due to the Sublime Porte which is estimated at $464,000. As the excess of revenue is not sufficient to pay this amount, the balance has to be made good by the British Government.

The products of the soil are one of the principal sources of revenue. Their grain, although it ranks amongst the first in the world, is depreciated in value from the defective system of threshing*, which is the same as was followed in patriarchal times. The grain, when brought from the field, is spread on a level piece of hard ground, and a flat piece of wood, having small pieces of flint inserted into its lower surface, is drawn over it. In this process small stones are detached from the ground, and of about the same size as the grain; no ordinary fanning machine can separate them.

Considerable improvement, however, has been made in the general condition of the island since the British took possession in 1878.

This island has for many centuries suffered severely from the ravages of locusts. During the past four years $335,000 has been expended in reducing their numbers.

Administration—Cyprus is administered under the Colonial office by a High Commissioner, assisted by a Legislative Council, composed of 18 members, 6 of whom are appointed by the Crown, and 12 are elected by the people.

Education is now in a progressive state. The grant for education in 1885 was $15,000. The number of schools in operation was 236, viz., 165 Greek, 63 Moslem, 6 Roman Catholic, 1 Armenian, and 1 Jewish.

In addition there are 12 schools for children kept by Moslem dames at their own houses.

Educational Exhibit.

Their exhibit included some excellent physical and other maps and diagrams, pictures and photographs, official reports, Turkish books, collections of zoology and ethnography, etc.

FALKLAND ISLANDS.

The Falkland Islands, consisting of the east and west Falkland, and about 100 other smaller islands, are situated in the South Atlantic Ocean; area about 7,600 square miles; population, 1,553.

These islands were discovered by Davis in 1592. In 1763 they were taken possession of by France. Subsequently they were held by the Spaniards until 1771, when they were for a time given up to Great Britain. In 1820 the Republic of Buenos Ayres established a settlement on these islands, which was destroyed by the Americans in 1831. In 1833 they were taken possession of by the British Government for the protection of the whale fishery.

The Government is administered by a Governor, aided by an Executive and Legislative Council, the members of both councils being appointed by the Crown.

Stanley is the chief town and seat of Government.

Wild cattle and horses are found in large numbers on these islands, and their chief exports consist of hides, horns, hoofs, bones and tallow.

With the exception of a photograph their exhibit consisted of natural products.

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* Photographs of similar threshing machines can be seen at the Educational Museum.

THE EMPIRE OF INDIA.

India is the central and most important peninsula of Southern Asia. It has an area of 1,500,000 square miles, with a population of about 250,000,000.

From the time of the expedition of Alexander the Great to the Punjab, in the year 330, down to 1600, settlements in India have been established at different periods by Mahometans, Tartars, Portuguese, Dutch, French, and English.

British India is about three-fifths of this vast country. The remainder is divided between different states, which are more or less dependent upon British authority. The British Empire in India commenced with the incorporation of the English East India Company, in 1600. This company existed for two and a-half centuries, having all the provinces of British India under its rule until the mutiny of 1857.

In 1858, at a grand *Durbar* held at Allahabad, Lord Canning announced that the Queen of England had assumed the entire Government of India. In 1877, at another more magnificent *Durbar*, held by Lord Lytton, at Delhi, and attended by all the great feudatory princes and chiefs, Her Majesty was proclaimed Empress of India.

Nearly a million square miles of territory, with a population of about 200,000,000, are now under British administration.

The last possession in India annexed by England was Upper Burmah, an area of about 192,000 square miles, with a population of from 3,000,000 to 4,000,000. War was declared by King Theebaw, in November, 1885. The King was captured at Mandalay during the same month, and the following proclamation was issued on 1st January, 1886, by the Viceroy and Governor-General of India.

"By command of the Queen-Empress, it is hereby notified that the territories formerly governed by King Theebaw, will no longer be under his rule, but become part of Her Majesty's dominions, and will, during Her Majesty's pleasure, be administered by such officers as the Viceroy and Governor-General of India may from time to time appoint.

(Signed) DUFFERIN."

India is governed as follows :—

Ajmere, Berar, Coorg, Andaman Islands, (Port Blair), under the Viceroy as Governor-General, who is Governor of the whole of India; Bengal (Lieutenant-Governor); N. W. Provinces and Oudh (Lieutenant-Governor); Punjab (Lieutenant-Governor); Central Provinces (Chief Commissioner); British Burmah (Chief Commissioner); Assam (Chief Commissioner); Madras (Governor); Bombay (Governor); Burmah (annexed 1886.)

The Lieutenant-Governors, Chief Commissioners, etc., are appointed by the Viceroy, subject to the approval of the Crown.

The trade of India is of vast importance; the total exports and imports amount together to over $750,000,000 annually.

The Government of India took a great interest in the Colonial and Indian Exhibition. At the first meeting of the Commissioners, in March, 1885, the Earl of Kimberley, Secretary of State for India, said, "There is, perhaps, nothing more desirable for India, than that its products and industries should be well-known in this country, although we have much more to learn from them than to teach them. Their beautiful manufactures, which they have produced for so many ages, have proved that there is a knowledge of many branches of art, which it would be a thousand pities should be diminished under our rule."

The collections were made with the assistance of the Governments of Presidencies and Provinces, and of the Rulers of native States, and formed three divisions. I. The Art ware Courts. II. The Economic Court. III. The Administrative Court.

The Art exhibits were divided with reference to locality, and not with reference to classification; this was done for the purpose of showing the character of the Art manufactures in the different Provinces of India.

Two sections the whole length of the Main Exhibition Building were occupied with these exhibits, and a very ingenious plan was adopted for showing one of their surviving branches of decorative art. It is the custom, even at the present day, for men of wealth to decorate their houses, and those of the gods they worship, with carvings in wood and stone. Each of the Provinces had one or more separate alcoves in which to exhibit their goods. The fronts of these alcoves consisted of carved screens, raised on arches, thus forming double façades the entire length of the building.

I.—ART-WARE COURTS.

The Art-ware Courts are entered through a carved gateway, sent by His Highness the Maharajah of Jeypore. The gateway is surmounted by a drum-house, such as are usually found over the entrances to royal residences or temples, in which musicians play. In the kiosk on the top were arranged figures representing musicians with their instruments.

Rajputana Court.

Twenty states forming the agency known by this name, under the Governor-General, exhibited in this Court. The Rajputana States represents an area of 130,000 square miles, with a population of ten millions. They stretch from the India agency to Sindh, and from Gujerat to the Punjab.

The Jeypore screen in this Court may be referred to as an illustration of the native art talent of Indian workmen. The only instructions issued to the wood-carvers were, that as great a variety of patterns should be employed as possible, the ornaments to be purely Indian. The men draw rough outlines with a pencil or even the graver, and each carver does what is right in his own eyes, subject to the approval of the master workman.

The Commissioner remarks that "the city of Jeypore is in all matters of art the most active of the Rajputana States. The local School of Art, under the patronage of the enlightened Rajah, has endeavoured to improve the indigenous art of the town by attending to details, so as to correct the habit of merely repeating the designs which have been handed down from their forefathers."

In this Court were specimens of gold and silver plate, lacquered-ware, inlaid work, glazed pottery, and textile fabrics. In addition the Jeypore School of Art sent a collection of articles in brass, copper, and mixed materials, which displayed excellence of work.

Central India Court.

This is a numerous group of States also placed under the charge of the Governor-General.

The area is 75,000 square miles, with a population of over nine millions.

The principal screen in this Court is intended to illustrate Buddhist and Hindoo sculpture, as found in Central India. The collection included stone-carving, jewellery, ancient and modern arms, lacquer-work, textile fabrics and embroideries.

Bombay Court.

This Presidency has an area of 124,134 square miles, and a population of sixteen and a-quarter millions. The native states add to these totals 73,000 square miles, and seven millions of inhabitants. Besides these, the State of Baroda, which contains 8,570 square miles, and a population of 2,185,000, was represented.

The design for the screen in this Court was made by the Superintendent of the Bombay School of Art. In the centre isle of the chief India Court was the Baroda Pigeon House; an admirably carved structure, which from its lofty position, was used by visitors

as a point at which friends missing each other in the crowds might meet during the exhibition. This collection embraced wood-carving, inlaid work, pottery, metal work, lacquered-ware, horn work, ivory work, and gold and silver work, etc. *Repoussé* work in silver is a specialty in this Province.

Bengal Court.

The Bengal Territory, governed by the Lieutenant-Governor of Bengal, includes Bengal proper, Behar, Orissa, and Chota Nagpur, containing an area of 150,588 square miles (exclusive of Sonderbands), and a population of 66,691,546—nearly one-third of the population of British India. In addition, the native states in connection with Bengal have an area of 36,664 square miles, and a population of nearly thirty-five millions.

The screens in this Court were intended to illustrate by means of *papier mache* castings, the styles of architecture of Hindoo and Mohammedan buildings in Bengal proper. The northern screen represents the Temple of Krishna, built between 1704 and 1722. The entire surface of this building is covered with terra-cotta reliefs, representing figure subjects taken from the daily life of the people. Casts, made in a mixture of *papier mache* and plaster of Paris, were made from those reliefs, and being coloured to match the originals, gave a good representation of the general effect of the ancient temple.

The collection included carving, sculpture and clay models, jewellery, inlaid work, lacquered-wares, textile fabrics, etc.; also specimens of carving in wood and repoussé copper electro-plated panels after Hindoo ornamental designs, from the Calcutta Government School of Art.

Nepal Court.

Nepal stretches from the southern ranges of the Himalayas, twenty miles into the "plain," and 700 miles along the Northern India frontier.

The area is about 54,000 square miles, and the population is supposed to be about two millions.

The Art-ware of this little-known territory was represented with examples of the special arts and industries which belong almost exclusively to the Newars, whom the Ghurkhas conquered about 1768.

In this Court was an illustration of one of the degrading customs of this country, which is not open to European tourists; it was a saddle used in the households of wealthy persons. These saddles are strapped on the backs of servants for carrying their masters and mistresses up or down stairs, or from room to room.

North-West Provinces and Oudh Court.

These Provinces and Oudh, forming together the upper portion of the great valley of the Ganges, have an area of 106,111 square miles, with a population of forty-four millions.

The seat of Government has been transferred from Agra to Allahabad.

One of the screens in this Court had a row of pillars from Agra, inlaid with precious stones, and presented by the Government of India to the national collection at South Kensington.

In this Court the general exhibits were similar to the preceding, but amongst the textile manufactures might be noticed a peculiarity not seen in the other Courts. The weavers interweave at the time of manufacture any design that may be suggested to them. Verses and sentences are most common, and these include passages from the Koran and Vedas, and others from Dr. Watts' songs and hymns, etc.

The Punjab Court.

This Province, including the territory surrounding Delhi, has an area of 106,632 square miles, and a population of nearly nineteen millions. There are also 39 native states in connection with the Province, comprising an area of 36,000 square miles and two million inhabitants.

In addition to the specimens of carving, jewellery, etc., this Court contained furniture, and excellent examples of textiles, including cotton and woollen fabrics, silks, and embroideries.

Kashmir Court.

The State of Kashmir extends from the plains of the Punjab across the central range of the Himalayas, towards Chinese Tartary and Tibet. The valley of Kashmir forms but a small portion of the whole area, which is estimated at 810,000 square miles, with a population of 1,500,000. The Maharajah presents annually, by way of tribute to his Suzeran, 1 horse, 12 goats, and three pairs of the celebrated Kashmir shawls.

In this Court are specimens of Kashmir *papier maché* work, carving, textiles, etc. Kashmir shawls were also exhibited, but it is said that this manufacture is dying out. The revenue from this source was formerly from $2,000,000 to $3,000,000 per annum, but within the past ten years the demand has decreased so much that it is stated that the art of weaving the finest shawls will probably be extinct in fifteen or twenty years, unless the Government takes steps to preserve the trade.

Central Provinces Court.

The Central Provinces, of which Nagpur is the headquarters, have an area of about 85,000 square miles, with a population of about 10,000,000. There are also fifteen native states, total area 29,000 square miles, with a population of nearly 2,000,000.

This Court had exhibits of wood, and stone carving, jewellery, textile fabrics, silk, etc.

Assam Court.

The Province of Assam includes the Upper Brahmaputra Valley, or Assam Proper. The area is computed at 46,000 square miles, total population about 5,000,000.

Assam is chiefly famous for its tea plantations. The art ware exhibits were not numerous in this Court.

Burmah Court.

British Burmah has an area of 87,220 square miles; before the recent annexation, its population was 3,736,771.

This Court contained a large collection of art work in wood and metals, textiles, etc.

Madras Court.

Madras has an area of 139,900 square miles, with a population of 30,688,500. The city of Madras, the third greatest in India, is entirely of English origin, and dates from the building of the British factory in 1639.

The screen for this Court was designed by the Superintendent of the Madras School of Art, and executed under his direction by Madras carpenters and carvers.

The Madras School of Art exhibited a candlestick and a *lota* in solid silver, made in the school; a collection of water vessels of brass, ornamented with silver and copper flowers; a carved window and native doorway, the work of one of the pupils, and a large variety of specimens of glazed and unglazed pottery, altogether the work of the school. The forms and colors of the old Madurra pottery are carefully followed.

Embroideries and laces were also exhibited by the Hobart School of Mahommedan girls.

Hyderabad Court.

Hyderabad, or the Dominion of the Nizam, has an area of 81,807 square miles, and a population of nearly 10,000,000. The Nizam is the chief Mahommedan native ruler, and a descendant of the Mighal Nizam-ul-Mulkh, (Regulator of the Empire).

The principal exhibits in this Court were manufactures of the ornamental metal ware of Bidan, which consisted of over one hundred different articles used for domestic purposes. The Commissioners say, "No dowry is considered complete among the better class of Mahommedans unless a complete set of *bidri* ware, from bed-legs to a spittoon, is included. The high prices often render it necessary for the father of a family to begin his collection years before his daughter is marriageable."

Mysore and Coorg Court.

Mysore and Coorg are continuous Hill States. Mysore is a native state ruled over by a descendant of the Hindoo chieftain from whom Hyder Ali usurped it. The total area is over 25,000 square miles, with a population of over 4,000,000.

Coorg is under the direct administration of the Governor-General. Its area is 1,600 square miles, with a population of about 180,000.

The exhibits in this Court consisted of sculpture, lacquer-ware, jewellery and textile fabrics.

THE ECONOMIC, OR IMPERIAL COURT.

This Court contained the raw products and rough manufactures which illustrate the resources of India, also minerals and ores, and geological maps, and models of Bengal farmers' homesteads and agricultural implements.

THE ADMINISTRATIVE COURT.

This Court included 1, Department of Revenue and Agriculture ; 2, Department of Finance and Commerce; 3, Home Department, including Education; 4, Public Works Department; 5, Legislative Department; 6, Foreign Department; 7, Military and Marine Department.

Educational Exhibit.

The Home Department exhibited illustrations of the means and appliances employed in the schools under their jurisdiction. A model of an indigenous school in Bombay was also exhibited.

In 1881, there were under instruction in India 2,879,571 males, and 155,268 females; out of the entire population only 7,646,712 males and 277,207 females could read and write. The number given in the statistics for 1881 who could not read or write was 217,171,284.

In 1882–3, the number of schools inspected was 111,237, with 2,790,061 pupils.

THE IMPERIAL INSTITUTE.

The proposition to establish a permanent institute representing the arts, manufactures and commerce of the colonies and India, has been under discussion in England for several years.

In 1874-5, the Chambers of Commerce and the Associated Chambers of Commerce of the United Kingdom, memoralized Her Majesty's Government on the subject of establishing an Imperial Museum.

In 1876, the *Times* fully discussed this question, giving an estimated cost of site, cost of buildings and cost of maintenance. That year was considered to be opportune, as the Centennial Exhibition was being held, it being supposed that arrangements might be made at its close for transferring the colonial exhibits from Philadelphia to the Imperial Museum.

The amount proposed to be raised was $2,000,000 for site and buildings; in addition, the estimates for maintenance amounted to $100,000 per annum. The promoters of the scheme were of opinion that this expenditure should be shared equally between England, and India and the colonies.

When the matter was publicly debated, it was considered that there would be no difficulty in raising one-half of the required expenditure from India and the colonies, but as regarded England, the question arose whether it was advisable to spend so much money for a museum, as they were then erecting the Natural History Museum, at a cost of $1,760,000, and, in addition, the grants for maintenance of museums and kindred institutes, amounted to over $1,000,000 per annum.

There is no doubt that the principal reason the Imperial Museum was not proceeded with in 1876, was because the Government did not vote the necessary funds.

After the close of the Paris Exhibition in 1878, efforts were again made to renew the project, but from various reasons they fell through.

The present seems to be a very fitting time for the establishment of such an Institution; the success of the Colonial and Indian Exhibition, and the approaching Jubilee of the Queen, were no doubt sufficient inducements for His Royal Highness the Prince of Wales to take a personal interest in endeavoring to establish an Imperial Institute, and for that purpose the Prince addressed the following letter to the Lord Mayor of London:—

MARLBOROUGH HOUSE.
Pall-Mall, S.W., Sept. 13.

DEAR LORD MAYOR,—My attention has been frequently called to the general anxiety that is felt to commemorate in some special manner the approaching Jubilee of Her Majesty's reign.

It appears to me that no more suitable memorial could be suggested than an Institute which should represent the Arts, Manufactures and Commerce of the Qeeen's Colonial and Indian Empire.

Such an Institution would, it seems to me, be singularly appropriate to the occasion, for it would illustrate the progress already made during Her Majesty's reign in the Colonial and Indian Dominions, while it would record year by year the development of the Empire in the arts of civilization.

It would thus be deeply interesting to Her Majesty's subjects, both within and beyond these islands, and would tend to stimulate emigration to those British territories where it is required, to expand the trade between the different British communities, and to draw closer the bonds which unite the Empire.

It would be at once a Museum, an Exhibition, and the proper locality for the discussion of Colonial and Indian subjects.

That public attention has already been forcibly directed to these questions is sufficiently proved by the remarkable success which is attending the Colonial and Indian Exhibition at South Kensington, and I confidently anticipate that arrangements may be made whereby the more important collections, which have so largely contributed to this success, will be placed at the disposal of the Institution.

I have much satisfaction in addressing this letter to your lordship as Chief Magistrate of the capital of the Empire, and to invite your co-operation in the formation of this Imperial Institute of the Colonies and India, as the memorial of Her Majesty's Jubilee by her subjects.

Should your lordship concur in this proposal, and be willing to open a fund at the Mansion House, I would suggest that the contributions received be vested in a body of trustees, whom the Sovereign would be asked to nominate, and I would further suggest that the institution should be under the permanent presidency of the Heir apparent to the Throne.

I remain, dear Lord Mayor,
Yours truly,

(Signed), ALBERT EDWARD P.

The Right Honorable the Lord Mayor.

In reply to this communication, the Lord Mayor replied as follows :—

The Mansion House,
London, E.C., Sept. 17.

Sir,—I have the honor to acknowledge the receipt of your Royal Highness's letter of the 13th inst. and, in reply, to express the great pleasure it will afford me to give the heartiest co-operation and aid in the formation of the proposed Imperial Institute of the Colonies and India as the memorial of Her Majesty's Jubilee by her subjects.

Your Royal Highness truly states that general anxiety is felt to commemorate in some special manner the approaching jubilee of Her Majesty's reign. There will, I am sure, be a universal desire to give expression in a suitable and, if possible, adequate way to the deep attachment, veneration, and loyalty which the Queen's subjects in all parts of her vast dominions entertain for a Sovereign whose long and illustrious reign has been productive, under Providence, of many blessings to her people, and been rendered memorable by the striking progress in civilization and prosperity developed throughout the Empire.

Difficult as it may be to signalize in a commensurate way the feelings which are thus naturally emphasized at the approach of the Jubilee of Her Majesty's reign, I am convinced that the proposal which your Royal Highness indicates, and which has the support of your influence, will be considered singularly appropriate.

It will, therefore, give me much satisfaction to open a fund at the Mansion House for the receipt of contributions, as suggested by your Royal Highness.

I have the honor to remain, Sir,
With the greatest respect,
Your Royal Highness' most dutiful and most obedient servant,

(Signed), JOHN STAPLES, Lord Mayor.

His Royal Highness the Prince of Wales, K.G.

So far as commemorating the jubilee of Her Majesty's reign is concerned, the proposal of His Royal Highness met with the approval of all classes, but England made very little response in contributing funds, although the colonies were quite willing to do so.

The British press discussed the scheme very fully, and while they all agreed on the desirability of founding an institute which, in addition to commemorating Her Majesty's jubilee, would also show the immense growth of the British Empire, they recommended that the site of the building should be decided upon, and the trustees appointed before subscriptions should be asked for. Some persons argued that the Institute should be made representative of the Empire ; that there should be a genuine representation of the colonial feeling which has not always been the case with Crown appointments.

It was also rumored that British Manufacturers were not disposed to contribute to the support of an institute which would be opposed to their interests, by the introduction of various branches of manufacture in competition with their own.

This gave rise to the appointment of a Royal Commission, to report on the best method for conducting and Imperial Institute. The Commission recommended that Great Britain should also be represented in the Imperial Institute. This is only fair, for those who contribute towards a public enterprise shouid certainly share any advantages to be derived therefrom.

The present proposition is, that the foundation stone of an Imperial Institute shall be laid on the day of Her Majesty's Jubilee. The site has not yet been decided upon, but there is every probability that the new buildings will be erected on the grounds where the Colonial and Indian Exhibition was held last year. The old buildings have already been removed.

The question now arises, what benefit will Canada derive from an Imperial Institute?

1. It is to be premised that each of the colonies will retain its own individuality, by having sufficent accommodation for a museum and offices; such an arrangement would be advantageous by concentrating all the colonial offices now dispersed over London.

2. It is considered that it would be more economical, as the expenditure for rents would be less, and the museum would be invaluable to the agents of the respective colonies in their dealings with commercial men or intending immigrants.

3. The museum would be a permanent advertisement of Canadian products and trade collections. Hitherto, Canada has only had an opportunity of exhibiting her products and manufactures to Europeans about once in each decade, this is doubtless of considerable value, but it is well known that private individuals who have amassed colossal fortunes in trade by advertising, have done so by constant and continual advertising. The same rule which applies in this case to the private individual is applicable to a colony. This can be proved by the action of Australia.

Prior to the Centennial Exhibition of 1876, some of the colonies of Australia voted money for the establishment of a colonial museum in London, and part of their permanent collection was exhibited at Philadelphia. Not knowing the date of the establishment of this museum I will take the year 1874. On comparing the value of exports from Australia to Great Britain, I find that the exports for the year 1884 amounted to over seven millions of pounds sterling ($35,000,000) more than the exports amounted to in 1874.

We will now see what Canada has done during the same period. In 1874, the exports to Great Britain amounted to $45,003,882; in 1884, the exports amounted to only $43,736,227; a decrease of $1,267,655.

It is therefore evident that permanent exhibitions are of great value to a colony, and if Canada is to find a larger market for her products and manufactures, we must not be satisfied with arousing temporary attention to our goods, as was done at the Colonial Exhibition, but must endeavor to increase our trade by keeping the importance of our forests, mines and fisheries, and our trade manufactures permanently before the people of other nations.

EDUCATION DEPARTMENT
ONTARIO